



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
Mitchell Bros. Company.
(INCORPORATED.)

Vol. III.

CHICAGO, ILLINOIS, APRIL 15, 1885.

No. 10.

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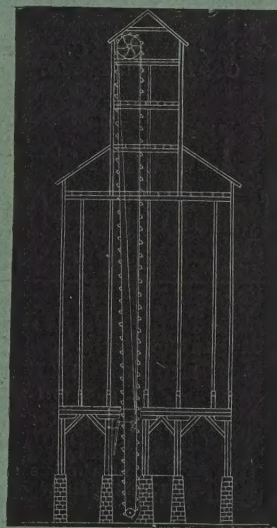
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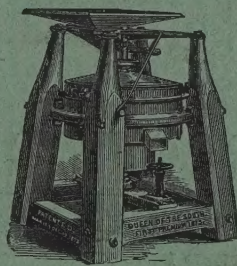
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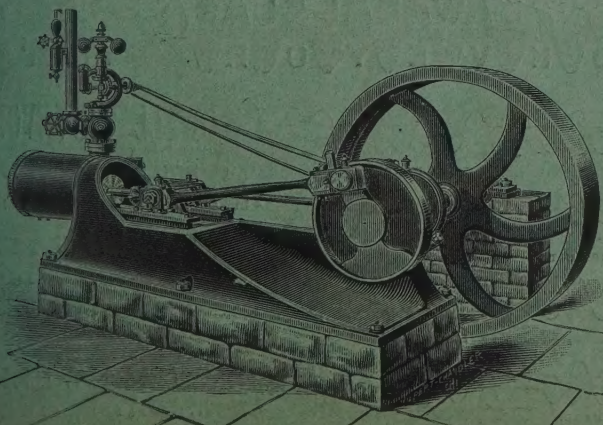
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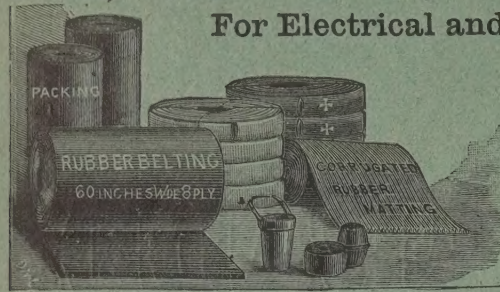
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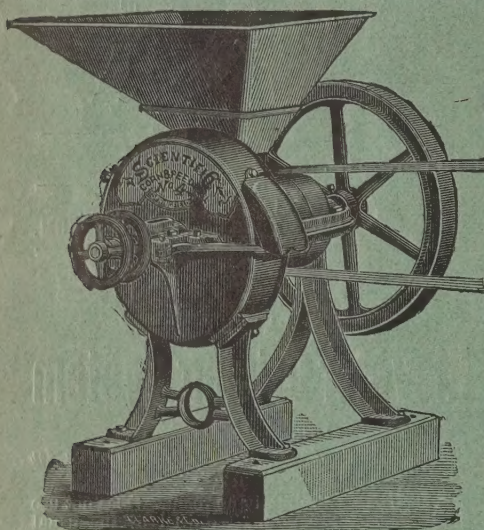
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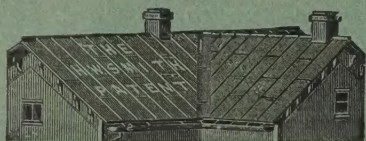
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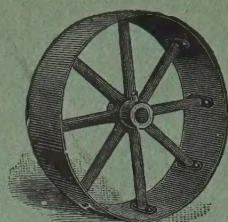
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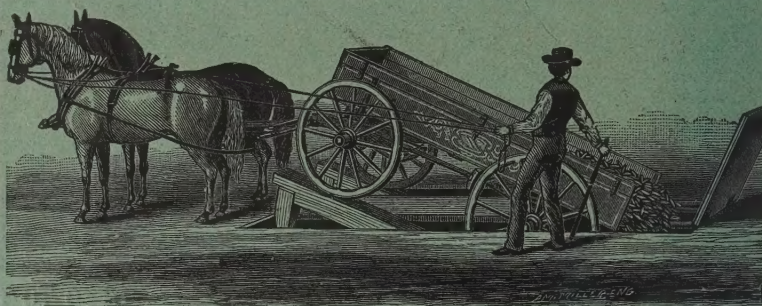
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GRAIN DRYING AND GRAIN DRIERS.

The reader's attention has frequently been directed in these columns to the importance of grain drying and its profitableness either as an independent business or as an adjunct of a regular elevator business. Thousands, yes millions, of bushels of grain that is damp or musty or "hot," and is sold at a ruinous price, might, if properly treated, receive a grade and sell at the market price. A number of machines devised for this express purpose have been described in former issues of this journal. One of these is that of Mr. S. E. WORRELL, of Hannibal,

with brick. No cooling arrangement is shown, it not being positively required in a machine of this size, unless floor room for spreading the hot grain is limited. It is compact, occupying a floor space of only two by twenty feet. It is strongly braced, so as to stand distant shipment and frequent removals. Motion is transmitted to the drying cylinder, which only extends a short distance outside of the ends of the furnace, by two grooved friction wheels of chilled iron or steel, each revolved by a sprocket wheel. These are connected by one link-belt chain to a counter shaft back of the drier. The exhaust fan is driven from the same shaft. A gate is placed in the air pipe for gauging the current to any required

CORN AND OATS IN THE SOUTH.

The fact the South has of late made great advances in the production of her own foodstuffs is shown by the *Manufacturers' Record* of Baltimore, from the official figures of the Agricultural Department. The increase of the production of corn in the fourteen Southern states in the ten years 1875-84 is seen in the following figures: There were 324,146,000 bushels grown in 1875, against 433,270,000 last year, or an increase of 109,124,000 bushels. The largest crops were in Kentucky and Tennessee, being last year respectively nearly 72,000,000 and 66,000,000; while Texas, with 60,300,000 bushels

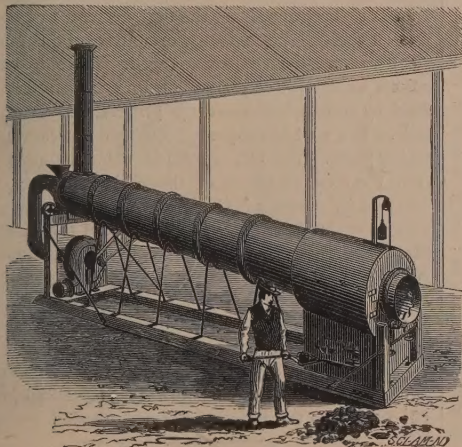


FIG. 1. WORRELL'S NO. 1 PORTABLE GRAIN DRIER.

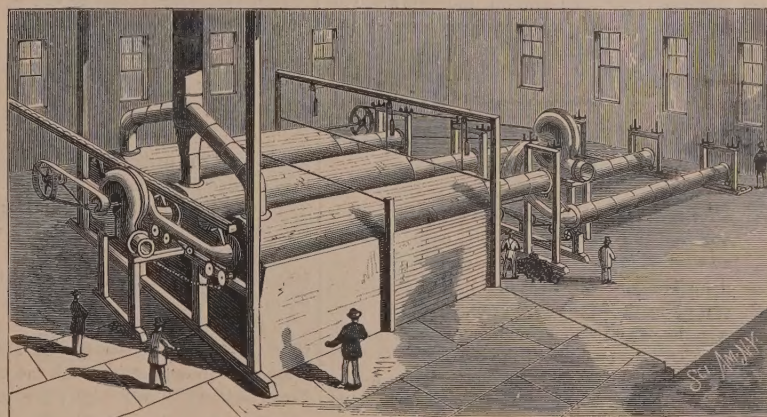


FIG. 2. WORRELL'S IMPROVED GRAIN DRIER AND COOLER. CAPACITY 5,000 BUSHELS PER DAY.

Mo. An extended description of this drier appeared in our January number to which the reader is referred for full particulars. Fig. 2 shows a perspective view of this gang machine.

One feature of this machine deserving of special notice is that it is exactly adapted to cooling "hot" grain, and that for this especial purpose, where the furnace can be omitted, it is made very compactly, and of large capacity. Another point which interested parties should notice is that it requires considerable time to build these machines and set them in operation; and therefore parties intending to purchase should send in their orders some time before the season for their use arrives.

Figure 1 is a portable grain drier, styled No. 1. It is of moderate capacity, and adapted to the wants of small dealers and millers. A new departure is taken in constructing the entire furnace of fire-clay material, this being of much lighter weight and having a better appearance than the conventional furnace of sheet iron lined

strength. The feeding hopper is shown at the left of the smoke stack. At the right can be seen the lifting screws for raising or lowering the end of the cylinder, to increase or shorten the time of the passage of the grain through it, which should be varied according to the amount of moisture to be removed.

This drier has a capacity of from thirty to forty bushels of damp grain per hour upon a consumption of about sixty pounds of coal. Coke, charcoal or wood can be used for fuel. It is complete and ready for operation as soon as connected with the motive power. It weighs 4,500 pounds, and requires only two-horse power. This machine is well adapted for drying granulated tobacco, sand, gravel, sawdust, coal screenings and other granulated material. Mr. Worrell has recently issued a new illustrated pamphlet, giving a full description of his drying and cooling machine, and the latest information on the subject of drying, a copy of which he will be pleased to mail to any one interested in the business.

had nearly doubled her product of 1875. The comparison with the increase of the entire country shows remarkably well for the South, in the face of the vast increase of the West. In the United States outside the former, there were about 997,000,000 bushels of corn raised in 1875, and in 1884 about 1,362,300,000, an increase of 36.6 per cent. against a gain of 33.6 in the South.

The cultivation of oats has also made large progress in that section, being a total of nearly 64,000,000 bushels last year, or an increase of 29,400,000 from 1875. In this crop the percentage of gain in the South was, in the period named, 85 per cent. against 62 per cent. in the rest of the country. This harbinger of the future progress of that rich section of our country is sustained in the products of all other foodstuffs, and of the industrial and manufacturing arts. Says the *Record*: "The agricultural wealth of the South, under the better system of farming, with diversity of crops, will be a revelation to the world in the near future."

THE BASIS OF RAILWAY CHARGES.

What should be the basis of railway charges, is a question rediscussed by the *Kansas Farmer*, especially as doubting the correctness of the principles at present generally admitted and acted upon. On the negative side, the writer says, the charges are not fairly to be based on the estimated cost of the construction of the roads. No merchant marks his goods according to the cost or rent of the building, which, with different competing firms, may differ by many thousand dollars; as a rule, the more expensive stores give the lowest prices. Neither on analogy can the capital invested be the basis of compensation. This may be real or watered stock, the result of careful or of extravagant expenditure. These are factors of immense difference as to origin of capital, and susceptible of great fraud. This is a way in which a company, receiving annually, say 6 per cent., is made to appear to be getting only 3 per cent. on its capital.

In the case of pools, these questions do not come into consideration. A certain business is to be divided between so many different companies so as to prevent competition from forcing prices below paying rates. The real principle on which the matter is settled and the receipts divided among the companies is, What is the work worth? In such cases, says the *Farmer*, the various expenses involved in the work as to wages, etc., are taken account of; but these are not based on the value, say, of the clothes the laborer wears or the amount invested in a freighter's team. Extravagance, waste, etc., are not to be paid for by the people; they are simply to pay justly what the work is worth. The cost system, says the writer, would give rise to infinite variations of rates according to the country and other elements of road construction, that could never be properly adjusted.

In further illustration of what are the other considerations of value of work, the writer supposes the starting of a new town at a point forty miles from any railway, with no change for two years. The rates are fixed by those who do the work, and settles down to rates that appear fair to all with no reference to the cost of freighters' teams, etc., but to what appears to all concerned reasonable. The *Farmer* considers the same principles as applicable to the roads whose expenses in construction, etc., the people have no voice in. Railway companies, under these influences, soon get down to fair and reasonable rates; these matters are in time settled fairly by the corporations or persons who do the work. The writer foresees a final satisfactory adjustment of the present difficulties in transportation, when our legislators understand "how."

CONSUMPTION AND DISTRIBUTION OF CORN.

The report of the Agricultural Department in March on the distribution and consumption of corn, presents the following facts, comparing the crop of 1884 with the preceding year: There remained at that date in the farmers' hands 37.6 per cent. of the last crop, or 675,000,000, from an aggregate of 1,795,000,000 bushels, against 33 per cent., or 512,000,000 bushels of the preceding crop at same time, aggregating 1,551,000,000. The stock in the Middle states was 29,000,000 against 22,000,000 bushels the year previous; in the Southern states it was 41.4 per cent., about the same as last year, but was 145,000,000 against 138,000,000 bushels. In the Western states the percentage was 36.7 against 30.7 in the previous year, and was 490,000,000, or 144,000,000 bushels more than of the previous crop at the same period.

Two years ago the stock remaining from an aggregate of 1,617,000,000 was 587,000,000 bushels or 36.3 per cent. A hard winter and low prices have encouraged home consumption, being 81,000,000 bushels in excess of that of the previous crop; the feeding quality of the latter crop, of which 87 per cent. was merchantable, was 10 per cent greater than the crop of 1883, which had only 60 per cent. merchantable grain. Five-sixths of the present crop is held for feeding; while the distribution beyond county lines is estimated at 298,000,000 bushels, against 314,000,000 the year previous. The full crop of the Middle states prevented the increased distribution. There were received at the principal Western markets from July 28 to Feb. 14 only some 55,000,000 against 68,700,000 at the same period last year. The Eastern demand was less and the foreign shipments were only 23,000,000 against 32,000,000 bushels in the similar previous period.

The proportionate stocks on hand in the six divisions of the country have increased, except in the South where it remains at the same percentage, but an increase of some 7,000,000 bushels. In a tabular statement of three years' remaining stocks in these districts the aggregate and percentage are shown to be steadily increased. The Western states have nearly two-thirds of the remainder in farmers' hands, being this year 490,000,000 of a little over 675,000,000 aggregate.

There are seven states in the West that produce nearly all the surplus corn for the commerce of this country, viz.: Ohio, Indiana, Illinois, Iowa, Missouri, Kansas and Nebraska; of these the stock on hand on March 1 was 437,000,000 this year, and 320,000,000 bushels in 1883. The proportion of merchantable corn as stated is high or about 89 per cent., while the extreme low point was in 1883, or 60 per cent., as shown in an experience of a series of years; the average of ten years as last established was 80 per cent. The quality of the crop is notably superior and sound. Of the amount left unharvested in the field the estimates are about 7.3 per cent. or some 111,000,000 bushels.

A KANSAS ELEVATOR.

One of the principal factors in settling and developing the great Western empire has been the elevator. The West is dotted all over with warehouses which form the nuclei of villages, many of which, if history is to repeat itself, will eventually become marts of commerce and centers of industry. A sample of the better class of



ELEVATOR OF JOHN TONTZ, GIRARD, KANSAS.

Western elevators is that an illustration of which is given on this page.

The elevator of Mr. John Tontz was built at Girard, Kan., last fall, and was in readiness to commence business about Nov. 20. The main building is 36x40 feet, divided into two stories besides basement and attic. In the basement there are a Victor Corn Sheller of the capacity of 300 to 400 bushels per hour, and the elevator boots. The first floor above basement, 8½ feet high, is used for a feed mill and a room for sacking grain, etc. On the second floor it has a driveway 12 feet wide, and the remaining 24 feet is divided into seven bins 20 feet deep, that will hold about 10,000 bushels shelled grain.

In the attic, or cupola, are one of Barnard & Leas' Corn Cleaners, and also one of their improved wheat cleaners. In connection with the building is a corn crib 24x48 feet and 16 feet high; the driveway through the elevator passes through the crib. There are two dumps in the building and two in the crib, with a drag belt to take the corn from the crib to the sheller. There is a 35-horse power engine and a steel boiler; the engine room is 20x32 feet and one story high. The height of the main building is 45 feet above basement.

All the machinery was furnished by the Nordyke & Marmon Co., Indianapolis, Ind. The building was erected by A. Reynolds under the direction of the owner, Mr. Tontz, at a cost of about \$5,500. It is located on a side track of the Southern Kansas Railway.

The grain shipments from the port of New Orleans during the month of March, 1885, were 1,832,551 bushels of corn and 20,148 bushels of wheat, against 472,561 bushels of corn and no wheat in March last year.

Illinois raises the largest amount of corn of any state in the Union, but her yield averages only 25 bushels per acre; Iowa's yield is 24.3 per acre, with a crop of nearly 170,000,000 bushels. The average yield of the New England states is 33.13, New Hampshire's, the largest, being 36, and Connecticut's, the smallest, or 30 bushels per acre.

A GRAIN CRIB ANNEX TO AN ELEVATOR.

In a place like Chicago, where nearly all grain is received by cars, and where most of the grain is shipped over the lakes to Eastern ports in vessels, thus taking advantage of the lowest freight rates, the grain accumulating during the winter months, or until navigation opens, has to be stored in the elevators, and therefore, during some winters such a tremendous storing capacity is required that all the many elevator buildings in this city are inadequate, even by filling the floors above and below the bins with grain. But considering that perhaps only once in several years additional storing room is required, while for the general transit our elevators are of sufficient capacity, an expensive building for taking care of this incidental surplus would hardly pay, it has become, therefore, the practice of late to build grain cribs alongside of an elevator, arranged to be filled and emptied by the machinery in the elevator, thus requiring very little additional machinery.

All the grain brought into this city on the C. B. & Q. Railroad is handled by Messrs. Armour, Dole & Co. in their five elevators, one of which, Elevator "D," at the foot of Morgan street and near Twenty-second, is the largest in the city, and, of its kind, the largest in the world. This elevator is 385 feet long, 101 feet wide, and 140 feet high. The bins are 60 feet high, and the storing capacity is nearly 2,000,000 bushels. Twelve elevator legs are placed through the center of the building for receiving grain from cars, and fourteen elevator legs—seven at each side—are for shipping purposes. This elevator was built in 1879, from plans and under the superintendence of Baumann & Lotz, architects and engineers of Chicago, Ill.

Alongside of Elevator "D," with six feet space between, has been erected a huge grain crib, which, for a length of 224 feet, is 96 feet wide, and for a length of 170 feet is 32 feet wide. This crib is divided longitudinally into seven compartments or bins; two bins are each 61x96 feet; two bins each 51x96 feet; two, each 60x32 feet; and one bin 50x32 feet, all being 50 feet high, with an entire storing capacity of over 1,000,000 bushels, so that, with the addition of this crib, Elevator "D" can now take care of 3,000,000 bushels of grain to be held in store over winter.

The ground for this building was covered with gravel, about one foot deep, and the entire surface of the grave was covered with railway cross ties, upon which the sleepers for the floors were placed. The sides and partitions were built of plank, 2x8 inches and 2x6 inches, staid by timber buttresses, by girders, and iron tension rods. The roof is supported on the buttresses and on inside posts. The bins are filled through spouts leading from the elevator heads of the main building, and are emptied by means of Caldwell's Screw Conveyors, arranged within tunnels at the bottoms of the several bins, that move the grain into the main building and deliver it into the boots of the shipping elevator.

This crib was built this winter, and although the season was a most unfavorable one on account of the severe cold and snow, its cost averaged only seven cents per bushel storing capacity. Messrs. Baumann & Lotz, Architects and Engineers, Metropolitan Block, Chicago, Ill., furnished the plans and superintended its erection.

SHORTAGE IN GRAIN CARGOES.

The question of the shortage in grain cargoes is noted by the *Marine Record* as one of increasing importance as shown in the heavy losses through that cause last year, and it urges that the captains should be prompted by the ship owners to adopt some plan whereby the bills of lading can be verified. In one case of a small vessel last year there was a loss of 500 bushels of wheat which, though on the bill of lading, was never received, and which took the vessel most of the season to make up the loss. This same difficulty has been met by vessel owners of England in regard to coal, until finally they refused to take coal cargoes except on a bill stating "weight and quantity unknown." But this plan is not practicable with our grain shipments. One of these classes of shortages comes from elevators who turn in short weights. The masters of ships should, says the writer, make it a rule to carefully examine his lading, and custom would soon enable him to judge at once as to his cargo. Boards of Trade and Chambers of Commerce are urged to take prompt measures for the eradication of this growing evil.

THE MACDONALD PATENT HYDROSTATIC LEVEL.

Numerous methods of leveling shafting have been given in these columns, some of them simple, some complex, some accurate, and some only approximately so. Of the utility, or, rather, necessity for accurate leveling, not only in shafting, but in scores of other instances where machinery, etc., are concerned, there can be no question; there is only a choice of methods and implements.

We give on this page an illustration of the Macdonald Patent Hydrostatic Level, as applied to leveling shafting, though this is only one of the uses to which it can be readily applied. As its name implies, this device is constructed on the well-known principle that "water will always seek its level." It consists simply of two metal gauges, in an opening of which a glass register shows the height of the water, connected by a rubber tube of any desired length. At the base of each gauge is a stop-

[Written for the AMERICAN ELEVATOR AND GRAIN TRADE.]

AMERICAN TRANSPORTATION AND COMMERCE.

BY W. T. S.

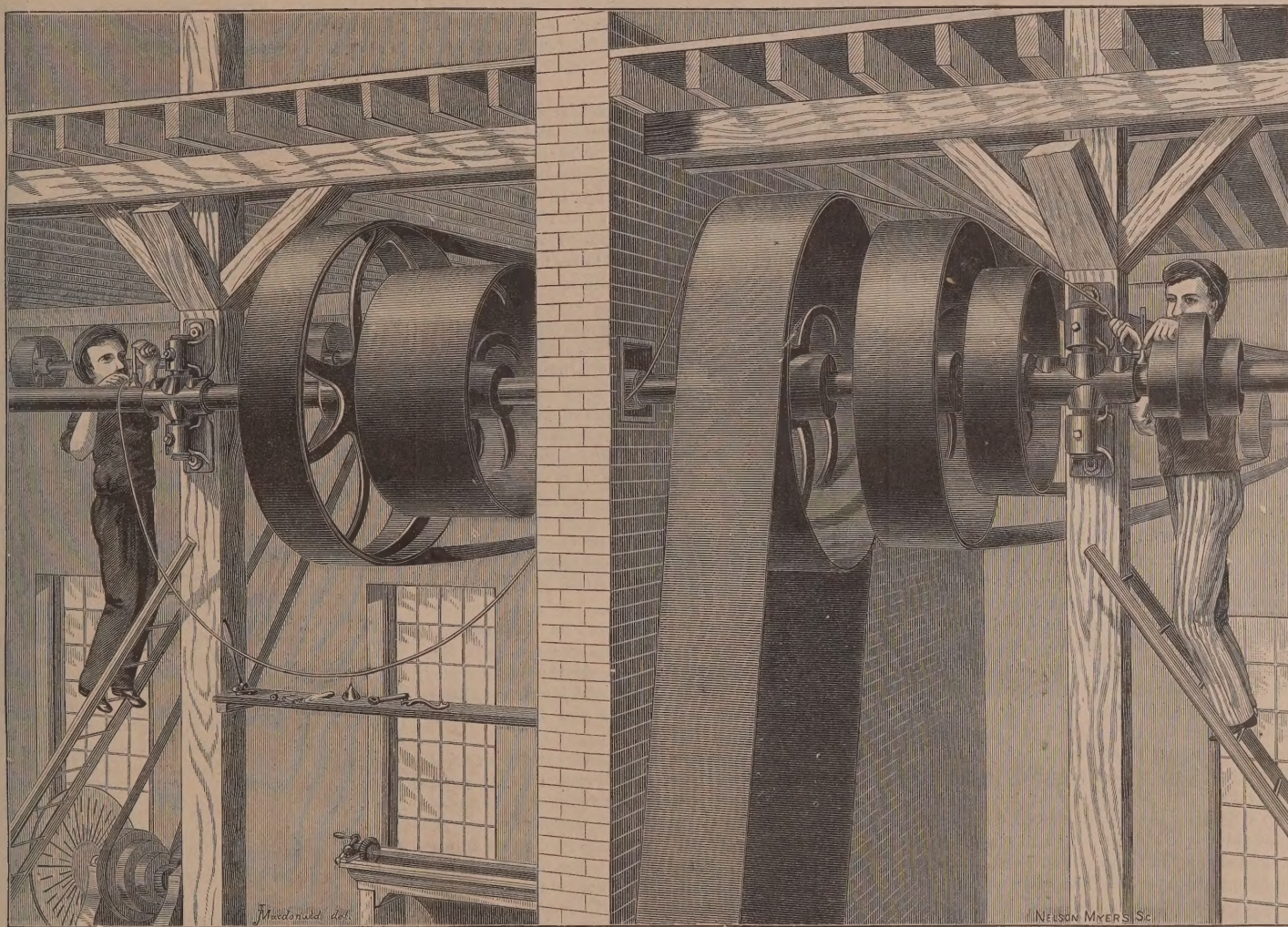
A very suggestive editorial appeared in the *Chicago News* of the 3d inst., that should have a much wider and fuller American and cosmic application, as well as local, than was intended, probably, by its writer. Its truths we propose to extend and apply, and its error we shall try to illuminate, after which, in due time, perhaps, it can be overthrown, and American and cosmic interests and duties be advanced. It is as follows:

ENGLAND'S POWER ON THE SEA.

The ability of the British mercantile marine, developed under the operations of the free trade system of that country, to furnish the government with war vessels of the highest class at the shortest notice, has been aptly and forcibly illustrated by the events now taking place under the pressure of the Anglo-Russian war scare. The admiralty has just taken up five large steamers from

And he whom his soldiers called the light of Israel, when they remonstrated with him against exposing his life in battle, has left us a true lamp, perfectly adapted to the use of true American students and practical workers. For we must study and work for that national and cosmic advance, now so greatly needed by us and by the world, and that neither that power typified in current literature as the Lion, and much better by the Psalmist as the Lion and the Adder, will help us to accomplish. On the contrary, it will find means to hinder and prevent, until by some means its misleading and corrupting influences are expelled from this land.

Even now it stretches over the world the hand of bribery and the hand of violence, precisely as in the days of Andre and Arnold, Washington and LaFayette. These mighty fleets, now placed in array where that arm of our power has rotted away, are not to give bread or salt to the suffering people of India, or improved commerce to us, or benefits to the world. They are to perpetuate a tax on salt of thirty times the value of the article taxed,



THE MACDONALD PATENT HYDROSTATIC LEVEL AS APPLIED TO SHAFTING.

cock to open or shut off connection between the gauge and the rubber tube. When it is placed on the points to be leveled, the cocks are opened and the water at once seeks its level. Then the cocks are closed and the water is held in each gauge exactly at the point where it came to rest. A comparison of gauges will then show exactly how much the points are out of level in inches and fractions, while a spirit level, on the other hand, only shows that the points are out of level.

The perfect accuracy and convenience of this level are its strong points. Its form gives it especial adaptability to taking levels over long reaches, around corners, or over obstructions, an instance of which is given in the engraving. It can be used in dark places just as well as in the light, and no skill is required to handle it. The WEBSTER & COMSTOCK MFG. CO., 125 and 127 Ontario street, Chicago, Ill., are the sole manufacturers. Two sizes are made. It has been in successful use in all sorts of manufacturing establishments for over two years, and its users are numbered by hundreds. The manufacturers will, on application, give prices, etc.

three companies owning Atlantic liners. These five vessels have a capacity of about forty to forty-five thousand tons, a combined indicated power of 50,000 horses, and can make from twenty to twenty-one miles an hour each. They are being armed with ten rifled cannons for each vessel, besides machine guns and torpedoes. This fleet is actually a navy in itself, and there are many more such vessels ready at any time to be transformed into war ships of extraordinary efficiency. The best protected navy in the world can do nothing like this.

Most instructive indeed is the lesson which that overmastering power on the sea should teach us. For ages it has dominated the world and menaced the world. Its type, however, as given in the same paper, and in the current Anglo-American and modern literature—the Lion—is very expressive as to only a part of its policies, by which this power and superior domination on this planet has been gained and is maintained. To understand this we need a cosmic and superior light by which to study modern history. And we need this brighter and truer light to analyze the poison in our own great national interests and duties, and in our great public affairs, so long hidden and befogged by the blinding influence of subsidies.

to the unfortunate people of India. They are to continue the withholding of even that necessity of human and animal life from women of India in the delicate and trying ordeals of pregnancy, and to condemn their offspring to disease and malformations in consequence of this oppression and robbery enacted under the stately forms of British law.

According to high English authority, six millions of white people of our own race recently perished there in one year from famine, and even the government admitted two millions of worthy people as thus perishing in that part of their proud empire in one year. Yet under the poison of their false literature less notice was taken of it in the world than of the imaginary sufferings of an imaginary negro, as described in a brilliant modern romance, which greatly moved the supposed hearts of the proud aristocracy of that ambitious island.

Voltaire said that God must be the heart of justice. And Jefferson said in effect that he trembled when he remembered God's justice upon nations.

Before this tribunal the island philosophers of "the

survival of the fittest" will not avail. Nor will any of the specious pretenses of the island Minotaur in his insatiate demands for the ceaseless tribute of human victims. As of old, the clue and the sword will be provided when the world finds the mind, the hand, and heart to use them. Perhaps, as in the Grecian story, some daughter of Eve will help the children of her race in Asia.

And as to free trade and our maritime arm and inland and ocean navigation, we cannot rebuild or advance on the false foundations of error.

In New York many years ago the writer saw, in the great workshops and ship-yards of that city, splendid ships, steamers, and machinery being built on foreign orders, sent from far distant parts of the Eastern hemisphere (notably Russia and Southeastern Asia), in preference to the yards and shops of England and Scotland. Then, too, the ship-yards of Maine, Boston, and New England, were a hive of industry and skill.

Our ocean shipping at the beginning of the war equaled any on earth. And no nation that ever existed had in so short a time built up such a marine as our people had done. And it was all done under a wise system of national protection of our own industries—invention, navigation, and commerce. The causes of this decline are various, and some are almost hidden in the ceaseless stream of delusions and errors constantly kept up and augmented from trans-Atlantic sources. For example, the captivating, but as yet impracticable, theory of free trade.

To illustrate the arrant deceptions from English sources, let us take India and her fearful necessities and immense possibilities as to commerce. Persia, her near neighbor, has, by her physical formation, an almost limitless supply of rock salt and salines, far more than enough for India's suffering and teeming millions, on to the world's end, and that could be delivered to them at a trifling cost and with great benefits to Persia, and to the commerce of all Asia, all Europe, and the world. To the north lies the Caspian Sea, whose waves wash the shores of the very cradle of our race. Into this, from Russia, pours the great river Volga.

This river and all the great rivers of European Russia are connected by large canals, so that boats can pass and repass between the great cities of the empire, and between the Black, the White, the Baltic, and the Caspian Seas. By the way, I learn (by a private letter) that long ago Russia sent to an American constructor (whose letter is before me) for a model for steamers for the Volga. A good American railway from the Caspian through Teheran and Ispahan, or by whatever route would be best to the head of the Persian Gulf, would be but a slight task for the able men who are now pushing our railway construction too rapidly for safety. And after the Suez, the Darien, the Illinois and Michigan canals, and the clearance of our rivers and their outlets; it is certainly the most inviting and every way splendid enterprise that the world can show for the men of a Christian nation and civilization to undertake and accomplish. With it and suitable elevators and such barges on the Caspian, the Persian Gulf and Indian Seas, as our own lake men have constructed, and the economy of STEAM TOWING which they have here developed, there would be new pulsations in the heart of Asia; and let us hope in the hearts of all the benighted Asian people, whom England is teaching to "delight in war." For by such means the greatest grain fields and salt beds of all that quarter of the world could be opened for the poor and famishing; too long the victims of error, robbery and wrong, and all the evils, burdens and impostures of war.

But the good Book tells us that grapes cannot grow on thorns, nor figs on thistles. Even the very word Tory signifies robber, and no such fruit can ever come of English feudal and Tory policies, as banishing famine from Asia. Even the very idea could not be conceived in connection with the policies of "The Lion and the Adder." And so, of course, it would be ridiculed. But let an American company present such an enterprise in Russia, and it would be well received. And so in Persia, were it not for the deadly clutch of the "Persian Concession," held by English speculators and monopolists on that unfortunate country. And one of the peculiar games of Tory policy now is, not to furnish bread and salt to the hungry people of India, but to wring from them by incredible abuses of taxation, government and commerce, enough wheat at their own prices to bear the American and Russian markets. And this is done very calmly and deliberately, and without the

slightest regard for the unthinkable woes they cause, and which only God can fully know and fully punish.

Be it ours then to upbuild our navigation and maritime and commercial affairs, and advance on the pathway of a wiser and better set off great and just interests, and high and commanding duties.

That men professing statesmanship and leadership should be indifferent to the amazing decline of American navigation is indeed most strange. It implies ignorance or disregard of all past history. It implies neglect and perversion of the history of our own country, and of the practical experience of our own practical men, still living.

Equally strange is the neglect or betrayal of the God-prepared means for its upbuilding, and for our country's safe and wise advancement. The Great Central line from the Straits of Mackinaw via the Illinois and Mississippi to the Southern seas, is still neglected or betrayed for impracticable and useless local schemes, strengthened and placed in the lead by powerful influences and amazing errors. The two great trans-montane schemes recommended in the immense report of a select committee of the United States Senate, and to cost at least one hundred and twenty millions of dollars, even according to the official estimate of their friends, strikingly illustrates this.

Disregarding our country's physical structure, and the admirable resources of this interior, and their grand arrangement and distribution, as prepared by God in nature; they disregard also the admirable arrangement of states and state boundaries through all the Mississippi basin and Great Lake region, and the truly wonderful correspondence of the great and sound local and national interests, in this central line from Lakes to Gulf.

So, too, with the impracticable schemes urged to the front, to impair or defeat the grand work of DeLesseps at Darien, which will bring our ports nearer to about half the world by an average of about ten thousand miles. With our own Central Trunk line, and the use of the world's Western gateway at Darien on equal terms with other nations, a new and splendid chapter in the history of our country and the world can be opened.

But it must not be feudal or Tory. Nor will it be Puritan. It must be Cosmic abroad and at home, in our land, American, and everywhere Christian. Not the Christianity of narrow bigots, but the Christianity of Christ, which fed the multitude abundantly, and without waste, relieved the weary, sick, and suffering whether sinners or not, and overthrew the tables of, and whipped the money-changing thieves. This, the great continental governments can accomplish, and on a sound business footing, and easily, when they stop fighting. But the island policies are in the way. Most of any are they in the way. And most of all material instrumentalities, our maritime power, and our ocean and inland navigation need to be upbuilt.

We cannot all be saints, or attain to worldly or spiritual domination. But we should all remember the grand things given us, among which are steam and electricity. And we should not forget that even our INFANT NATION AND NAVY vindicated our inheritance on the seas of this planet, and even quelled effectually the fierce and cruel Corsairs whom Europe had submitted to for ages. And without shedding one drop of blood, it opened the closed Empire of Japan to the light of Western civilization, beneficent commerce and sound advancement. It carried food to starving Ireland, as it can again as easily to starving Asia. In our merchant ships India sent us gunny bags for the corn grown in the Mississippi Basin, as South America did the medicine for the ague. And as to building railroads in Asia, our countryman long ago built a railroad *over the mighty Andes*, and thus prepared for uniting the Amazon and its vast basin with the Pacific and its cosmic shores, and their thousand millions of people by that line; as De Lesseps (let us hope with or without our aid) will better do it by the water gate for all the world. Certainly the *News* is right in that we need to advance. And the American Mediterranean, and the Mississippi, the Illinois, Lake Michigan, and the Illinois and Michigan Canal are the present vital physical factors for that advance. So, too, is the American purse of silver and gold—with the old dollar of Spain and Spanish America (of Germanic origin) known to the world for full two centuries before our flag appeared—more widely than any coin or unit of value, that ever existed in human commerce; and to which we have added the decimal divisions—thus far advancing its claims for a universal unit, or standard measure of value, for the commerce of mankind. Surely

It is for all our interests in every good sense, and for all our high and commanding duties, that we should now promptly and wisely advance in all our practical affairs; not on a pathway prepared for us by England or any other nation, but on the God-appointed pathway of our inheritance, American, Continental, Cosmic, Christian. From the beginning of the world's navigation on the old Mediterranean, it was greatly aided by its continuity. Merchants and sailors could come and go upon voyages in winter or summer, spring or autumn. So, upon the development of navigation in Great Britain, and the North of Europe in recent times; it has been a great aid in every way that a large portion of the shipping could in winter go upon voyages to Southern climes. And so with our own navigation interests of the North Atlantic coasts. But our lake shipping is kept in an icy prison for half the year. Let us open this central line and they can then pass to the Southern seas, and to the great South American rivers with those fine steamers and barges—or some of them at least. And to reach all the islands and shores of the vast Pacific, it is very possible that steam towing may prove a better economy than the immense English steamers now in use on the Atlantic, and designed for war over all the deep waters of this planet.

NEW TRANSFER ELEVATOR AT KANKAKEE, ILL.

The *Kankakee Gazette* of April 9, says: "Arrangements were perfected last week for the erection of the big transfer elevator at the C. I. St. L. & C. depot. Instead of its being fathered by the C. I. St. L. & C. folks it has been turned over to Messrs. R. G. Risser, of Sheldon, and T. G. Warden and C. W. Johnson, of this city. These gentlemen have organized the Kankakee Elevator Company with a paid up capital stock of \$21,000. It is their purpose to put up a transfer elevator 24 feet wide and 24 high, with a capacity for at least 100 carloads of grain. The elevating machinery will be of the most approved description, operated by a powerful steam engine, and capable of emptying or loading a car in five minutes. Provision for additional storage capacity besides the 100 car loads mentioned, will be made. An immense amount of grain comes off the Illinois Central and the Kankakee & Southwestern roads—sometimes as high as seventy-five cars being given by these two roads to the C. I. St. L. & C. in a single day. It will greatly facilitate the grain trade tributary to those roads if the cars can be unloaded at Kankakee and returned the same or the next day to the various stations where they are needed. It is probable that state inspection will also be established here.

"The gentlemen comprising the Kankakee Elevator Company are old hands in the grain business, and are financially solid. Mr. Risser is a leading business man at Sheldon, and the senior member of the grain and coal firm of Risser & Warden. The junior member resides in Kankakee, and manages the extensive wholesale coal trade of the firm. Mr. Johnson is the well-known grain merchant of Kankakee. Mr. Risser will remove to Kankakee to give a personal supervision to the new business. The elevator will furnish employment to about ten men. The structure will be located just west of the gas works, and will be provided with side-track room for forty cars on both the receiving and shipping tracks. This additional side-track room, together with the new tracks which the railroad company will require this season for its own business, will necessitate the purchase of more land, and officers of the company will be here at once to make the necessary arrangements."

STATE ELEVATORS.

A bill was introduced by Mr. Sherman into the Assembly of the New York Legislature on April 1, authorizing the state to provide elevator facilities for grain, and directing the Superintendent of Public Works to contract with the lowest bidder for the erection of two floating elevators of the latest improved pattern, to be completed by Sept. 1. They are to have a capacity for the transferral of 12,000 bushels per hour. One is to be placed in the Erie Canal at Buffalo, the other in the New York harbor. The state is to maintain them, charging a fee of not more than one-fourth of a cent per bushel for handling the grain. All net profits accruing are to be applied to extinguishing the canal debt; the bill appropriates \$80,000 for the work.

GRAIN PRODUCTION AND MANIPULATION IN JAPAN.

The United States Consular reports as to the use of agricultural implements in the several districts for 1884 present, with much matter of practical interest, some facts that are curious because of the primitive simplicity of the apparatus and methods in use. This is notably the case in Japan where, with much evidence of progress in art, one feels as he looks over the fields as though he had gone back to the Adamic period. The labor in the field in Japan is almost entirely done by hand with the help of rude implements, made mainly of wood at small expense, which hold their own against the introduction of American agricultural implements. The descriptions sent are in the main simply illustrations by cuts that tell their own story. The Government experimental farms

THE ORIGIN OF INDIAN CORN.

The deeply interesting question to the American as to the origin of Indian corn, *zea mays*, is not answered, while there is no positive evidence against the view that it originated in America, except that of conjecture and analogy, with the other cereals that are admitted to be of Eastern birth. Mr. J. C. Vaughan, of this city, has devoted careful study to this grain and potatoes, on which he has published an almost exhaustive manual, giving all the curious theories and facts, as gathered from history and tradition.

The literature of Indian corn commences with the discovery of America in fact, where the plant in large varieties was found widely scattered over the continent north and south, and freely cultivated. The study and surmises of scholars from about 1532 to ten years later,

to Asia Minor by the Crusaders. A large number of scientific writers, who hold to the American origin of corn, deny that the plant so described was a species of our maize, and say that no treatise was ever written on this grain until after the discovery of this continent. It seems strange that so readily produced a grain, if known as stated above, should not have spread widely through lands abundantly adapted to its growth while in this country. It was cultivated, as said, in large varieties, almost throughout the continent.

CANAL TRAFFIC AND THE POOL.

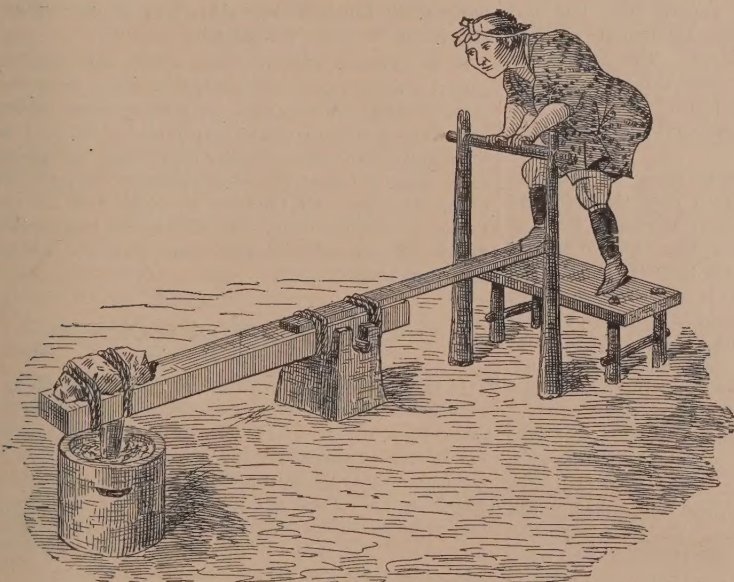
In regard to the bills pending before the New York Legislature for regulating the transshipment of grain, putting the prices at reasonable rates, the *Marine Record* referring to its previous onslaught on railway pools, and their baleful effects on inter-state trade, says that the



WINNOWING GRAIN IN JAPAN.



GRINDING GRAIN IN JAPAN.



HULLING GRAIN IN JAPAN.



HULLING GRAIN IN JAPAN.

alone furnish any demand for modern tools. Labor is cheap; male hands get food, lodging and five holidays per month, and \$8 to \$13 per year for fourteen hours work per day. The women work the same number of hours but have no holidays, and besides food and lodging get about \$6 per annum. The grain is planted by hand in drills, and cut with shears or sickles. Wood composes the large part of all the tools enforced, where required by teeth and dressings of wrought iron.

In Fig. 1 is represented one of the Japanese methods of winnowing grain by the use of a suspended, square sieve. Fig. 2 shows a common mode of grinding grain by hand power, that carries its own description. Water power is applied to a similar shaped mill by means of a trough and the use of a wheel.

Methods of hulling grain are shown in Figs. 3 and 4. The hulling of the grain requires much more physical exertion; a cylinder similar to the outer grinding apparatus holds the grain, which is beaten with a huge mattock, as seen in Fig. 4. The Japanese have plows, spades, rollers and pulverizers, and many ingenious small tools that resemble those used in our home gardens. These are made, as stated, with very little or no metal. There are at Kobe three American trading companies doing an extensive import business with Japan and China.

thirty years after the discovery of the New World, made by a number of eminent scientists, attribute it to Arabian, Asiatic and Spanish origin variously, according to the stories of the age; it was said to have been introduced into Greece from Asia, while many thought the plant a native of China. The Crusaders were said to have brought it West from its Eastern home.

As has been said, the fact of its Eastern origin is a matter of conjecture, while the evidence of an ancient civilization on this continent, dating back perhaps to the earliest ages of the present race, are accumulating. Very many eminent scholars have claimed its Eastern development, but those as noted, as Baron Humboldt, Darwin, Flint, etc., believe in its American birth. The United States Patent Office report for 1853 has a cut of our wild corn, in which each kernel is inclosed in husk, found growing in the Rocky Mountains and down as far as Paraguay. It is said to have been found growing in the latter state wild in the forests. From the seed of this variety the common varieties can be grown, which seems to prove that it is not a primitive variety, but one that had escaped from the ordinary type.

In a map of the thirteenth century, alluded to by a Chinese botanist of 1552, called "Chart of Incisa," there is described a grain of golden color, partly white, styled *meligna*, a native of China, claimed to have been brought

elevators handling the grain passing through the Erie Canal are engaged in the same injurious practice. The underlying idea seems to be that the canal was built in the special interest of Buffalo, where thirty elevators exist, as the writer claims, while eight or ten easily do the work controlling the entire freights and compelling the lake tonnage to pay exorbitant profits into the treasury of an usurious pool. The ultimate effect is the depreciation of the value of canals in general, injuring deeply the water routes which have been the safeguards against railway aggression, and preventing the advantages designed by freeing this canal of tolls. On the strength of this showing the *Record* urges the people who have labored for this reduction and all interested in the grain trade to urge the adoption by the legislature of efficient remedies. The writer suggests that it may result in an ultimate benefit by stimulating the construction of an American canal around Niagara in order to preserve this immense and increasing grain traffic; there is no reason, says the *Record*, why this improvement should not be classed with those of the lakes, and it hopes at an early day to be authorized to publish the fact of the initiation of the work.

A prominent local speculator sold 500,000 bushels long wheat one day last week at 7 cents profit.

LEGAL NOTES.

Stoppage in Transit.

The right of an unpaid vendor to stop delivery of goods while in transit is not determined until the goods have been actually delivered to the vendee or his agent. Delivery to a railroad company though nominated and employed by the vendee to carry the goods, is not such a delivery.—*Kendall vs. Marshall, 46 Law Times.*

Vendor and Agent.

An innocent vendor can not be sued in tort for the fraud of his agent, in effecting a sale. In such case the vendee may rescind the contract and reclaim the money paid, and if not repaid may sue the vendor on implied contract, or he may sue the agent for deceit.—*Reiss vs. the North German Lloyd, United States Circuit Court, Eastern District of New York.*

Consignment—Account Stated.

Where goods consigned to a commission merchant are sold and a statement of the sales, with an order on a third person to balance the account, is sent to the consignor, he is bound by the account rendered as by an account stated, unless within a reasonable time he notifies the consignee that he objects. So held by the Supreme Court of New Hampshire in the case of *Austin vs. Ricker.*

Indorsement.

A negotiable note indorsed before maturity is not subject in the hands of the indorsee to a set-off, in favor of the maker, of a debt due by the payee at the time of making the note. The law presumes that the holder of such paper is the owner and took it for value and before dishonor, and that an undated indorsement of the same was made at the date of the note, or at least antecedently to its becoming due. And if the defendant would avail himself of any defense that would be open to him only in case the note were negotiated after it was dishonored, it is incumbent on him to show that the indorsement was in fact made after the note was overdue.—*Tredwell vs. Blount, Supreme Court of North Carolina.*

Dissolving Partnership.

Where one member of a firm assigns his interest in the assets of the copartnership to his other partners it does not necessarily work a dissolution of the partnership, unless an intention to dissolve be shown. Any fact tending to show a dissolution is admissible to affect the holder of a note drawn in the name of the firm, if he had knowledge of the fact. If one of a firm withdraws and the existing partnership continues the business, it is constituted as was the original partnership, but is a new firm. And whether a member thereof could bind the firm by a promissory note for an old debt would depend on circumstances, and the exclusion of evidence regarding this fact is error.—*Walker vs. Davis et al., Supreme Court of Iowa.*

Contract Restraining Trade.

This action involves the construction of a contract by which a large number of carriers engaged in the business of running steamers and barges between St. Louis and New Orleans agreed to refrain from competing with each other. The question as to whether the contract was injurious to trade was net raised in the trial court, nor in this court, nor when the case was in this court on a former appeal; and, under the circumstances, the court finds the contract to be one which it will not, of its own motion, pronounce to be void, as against public policy. Under the contract any one of the contracting parties may withdraw at pleasure without any penalty. K claimed that his interest in the fund in question was not an interest represented by the particular boats which he owned, but an entire interest, and that he was entitled to the same share of the fund which he had helped to own with three boats as if he had helped to earn it with four boats, as was contemplated when the agreement was signed. It was claimed by K that a contemporaneous construction of the contract by the parties interested in the common fund, gave color to their claim. But it was held to be impossible to so construe the contract without refusing to give any force to some of its material provisions.

The fact that K was permitted to share in the first dividend on such a construction of the contract, in view of the peculiar circumstances of the case and the numerous provisions of the contract pointing to a contrary conclusion—is regarded rather as a waiver of right than as a construction of the contract.—*Hoarstick et al. vs. Shields et al., St. Louis Court of Appeals.*

BALTIMORE'S GRAIN TRADE.

The facts as to the grain trade of Baltimore, compared with the other Atlantic ports, taken from *Bradstreet's* of March 28, show that the wheat exports of Baltimore had made a uniform increase from 1876 to 1880; for the next three years they decreased, steadying again in 1884. During the last decade, from a little over 2,000,000 they declined to some 1,660,000 bushels, being the lowest of the period in the following year; they were about 33,770,000, the largest in 1880, and 16,500,000 last year. The destination, mainly to the following points, was in 1880-81 10,000,000 to Great Britain, and about 5,750,000 to France; to Germany and Belgium respectively they were 534,000, and 1,045,000 bushels. The exports from Baltimore of heat to France were larger proportionately than from New York. In the above year noted those from the latter point were 16 per cent., while from Baltimore they were 32 per cent.; the following year the ratios were 8 to 24, and in 1882 3, 14 and 33 per cent. respectively. In comparing these cities, Baltimore's grain in the past year was 7 and New York's 40 per cent. in their respective exports of wheat.

The exports of corn from Baltimore have been very variable. In the ten years ended 1884 they were about 7,000,000 bushels in 1875; about 5,000,000 last year, and in 1882, the smallest of this period, about 1,400,000. In 1876 they were about 21,000,000, and 21,330,000 in 1879, the largest of the decade. The exports from that port of oats, rye and barley were small, the largest, rye, was reported as 398,000 bushels last year. The percentages of Baltimore's total exports of cereals in the aggregate of the five principal Atlantic ports in 1878 were 1869, and the year following were 22.26 per cent.; in 1884 they were 23 per cent.

Baltimore is well equipped with grain handling and storing facilities; the B. & O. Road operates four, and the Northern Central two stationary elevators; three at Locust Point, two at Canton, and one at Camden Station, aggregating a capacity of 5,000,000 bushels. The last was erected in 1883 for local trade; it was expected that it would indirectly affect the trade in foreign oats, but this has not been the case. In addition to the above there are four floating elevators that can handle 14,000 bushels per hour. The rate is 1¼ cents per bushel when received from cars, including weighing, delivering, wharfage and storage for the first ten days; when received from vessels the rate is ¼ of a cent higher, and for each succeeding ten days ⅜ cent per bushel is added. For delivery in bags 1 cent is added, and for screening and blowing the charge is ¼ of a cent. The grain inspection of Baltimore is excellent; with the exception of a small lot of corn, said the President of the Corn and Flour Exchange, from the first car load received at Elevator "A," not a bushel has been posted as out of condition.

GRAIN ABROAD.

The latest reports from all European sources as to the condition and prospects of the grain trade, state that the universal agricultural depression grows worse every month, as is shown in the general action of the various governments to protect this industry by means of tariff. While there has been a great variety of conditions of the weather the result of the winter is a favorable outlook for fall sown grain, although a general shrinkage of cultivation has followed the low prices of the past few years. There is great difficulty in obtaining accurate foreign statistics as to the production of grain, its distribution and consumption, and only an approximation to accuracy is gotten by a comparison of the reports of a number of years. From such a review it appears that in a European population counted at 286,000,000, the average annual supply of wheat is 690,000,000 centals, and of all the cereals together 2,368,000,000 centals. The average would be some 4 centals of wheat, and 8.5 of all grains per capita. Our own supply of wheat for bread and seed is nearly double that of Europe, and our supply of all cereals about three times as great; the large use of corn here in place of roots and forage abroad must be taken into account in this estimate.



Wm. H. Lotz, of this city, has patented a hoisting machine.

The Harrington & King Perforating Co. of this city report a very satisfactory business.

The firm of Skinner & Wood, Erie, Pa., have dissolved partnership. The Skinner Engine Co. continues.

Messrs. Dickey & Pease, Racine, Wis., have been shipping a number of their flax cleaners to points in Dakota.

The Barnard & Leas Mfg. Co., Moline, Ill., are having an excellent trade in their specialties, especially with elevators in Kansas and Nebraska.

T. M. Nagle, of Erie, Pa., is about to build a boiler shop, to be fitted with new machinery, which it is estimated, will cost about \$20,000.

The Roller Chain Belting Co., Columbus, Ohio, have recently furnished a number of large saw and pulp mills with their roller chain for conveyors and driving belts. They are running full time, and report an increased business.

The Medart Patent Pulley Company, St. Louis, have arranged at their works and brought out patterns for the manufacture of rigid and adjustable post hangers, drop hangers, compression couplings, adjustable and rigid pillow blocks, and the like.

M. Deal & Co., of Bucyrus, Ohio, report business fair. In one week recently they shipped thirteen of their improved California Smutters and Separators to various parts of the United States. Also four of their largest size Brush Machines to England.

H. W. Caldwell, 46 South Canal street, this city, has shown us an elevator bucket made of steel from one piece of metal, without seam or rivet, rounded bottom and rounded corners, and so shaped as to take and deliver well. Its form is such that large sized buckets are made without braces, so that they can be "nested" for cheap shipment. Mr. Caldwell is certain that in this bucket has been accomplished what bucket makers have been striving to attain for years, and therefore he has named it "The Climax."

THE VALUE OF CORN.

In view of the high valuation of wheat, which as a bread food has been the metre by which the civilization and refined culture of a community is gauged, has led to a failure to appreciate the immense importance of our corn crop in its economic and commercial relations. The New York *Produce Exchange Reporter* calls the attention of its readers to this great factor in our national prosperity. The value of this crop does not lie in its immediate price, but in its secondary relations to the prices of all kinds of meat, beef, mutton, pork and poultry, and to the food of the working man. The falling off in amount in 1881 of this crop amounting to some 500,000,000 bushels, and about the same in value, on account of poor quality in 1883, were the causes of the increased prices of meat, consequently of labor, and as a result the lowering in the value of stocks, which has been very great the last few years as seen in railways, building and general improvements.

The reverse of this picture the *Reporter* shows in the recent depression of the prices of food, largely due and manifest before realization, to the splendid corn crop then growing. Cheap food for the working man with steadiness of demand in the labor market is the measure of national prosperity. It is also a fact that has been developed in the investigations of army sanitarians that there is no food so wholesome in field service as corn meal. There is less of that concentrated protein elements, which in hard tack are in excess of the healthy demands of digestion, and more of the force producers such as oil, sugar and the carbo-hydrates in the various preparations of corn. It was noticed in the war of the Rebellion that the Southern troops were, if less fleshy, more wiry and enduring than the wheat-fed Northern soldiers, with special power of the endurance of secondary surgery. Convenience of preparation and carriage has led to the overlooking of these important facts by army purveyors and their class.

LATE PATENTS.

Issued on March 10, 1885.

CAR STARTER.—Christian A. Iversen, Copenhagen, Denmark. (No model.) No. 313,824. Filed Jan. 27, 1885.

CORN SHELLER.—Nicholas Potter, Troy, Pa. (No model.) No. 313,619. Filed Oct. 10, 1884.

Issued on March 17, 1885.

BELT SHIFTING AND REPLACING DEVICE.—Philip Diehl, Elizabeth, N. J., assignor to the Singer Manufacturing Co., of New Jersey. (No model.) No. 313,999. Filed Jan. 31, 1885.

GRAIN CLEANER.—Daniel Best, Albany, Oregon (No model.) No. 313,911. Filed Jan. 20, 1884.

GRAIN CLEANING MACHINE.—John D. Hasselbusch and Hermann Hasselbusch, St. Louis, Mo. (No model.) No. 314,123. Filed Nov. 10, 1884.

AUTOMATIC DUMP BUCKET FOR HOISTING AND CONVEYING MACHINES.—Alexander E. Brown, Cleveland, Ohio. (No model.) No. 314,101. Filed Jan. 2, 1885.

TOW BOAT FOR CANALS.—David W. Cooke, Franklin, Tenn. (No model.) No. 313,920. Filed Feb. 10, 1880. Renewed June 14, 1884.

Issued on March 24, 1885.

ANIMAL POWER.—Mark Thompson and John Kucher, Athens, Pa. (No model.) No. 314,492. Filed April 25, 1884. Renewed Feb. 7, 1885.

CAR STARTER.—Frank Dawson, Sr., and Frank Dawson, Jr., Williamsport, Pa. (No model.) No. 314,519. Filed Aug. 4, 1884.

CAR STARTER.—Newell J. Roberts, Battle Creek, Mich. (No model.) No. 314,299. Filed Feb. 4, 1885.

APPARATUS FOR DISCHARGING CONTENTS OF VESSELS AND CARS, ETC.—Alexander E. Brown, Cleveland, Ohio. (No model.) No. 314,424. Filed Jan. 12, 1885.

Issued on March 31, 1885.

BLAST REGULATOR FOR GRAIN SEPARATORS.—Jefferson Grube, Newark, Ohio. (No model.) No. 314,668. Filed July 10, 1884.

HOISTING MACHINE.—Wm. H. Lotz, Chicago, Ill. (No model.) No. 314,696. Filed Aug. 24, 1883.

AUTOMATIC WEIGHING SCALE.—Morris F. Koch, New York, N. Y. (No model.) No. 314,854. Filed Sept. 24, 1884.

Issued on April 7, 1885.

BALING PRESS.—William J. Perkins, Elliottstown, assignor to two-thirds to Michael Dietrich and Harden Lambert, Wheeler, Ill. (No model.) No. 315,062. Filed Dec. 9, 1884.

CAR STARTER.—Charles F. Dodge, Pocahontas, Ill. (No model.) No. 315,258. Filed Sept. 19, 1884.

INDEPENDENT ELEVATORS AT BUFFALO AND NEW YORK.

The Erie Canal interests have at length taken up the matter in earnest of meeting the elevator difficulties by building and controlling their own houses. A meeting was called in New York for April 7, to which merchants and all interested in this matter were invited. It is proposed to organize a company styled the "State Protection Grain Elevator Company," and the charter has been applied for. The company will operate three floating elevators in New York harbor, and one first-class tower elevator at Buffalo. The following table shows the old charges compared with those proposed, which will be a decrease of one-half:

| Old charge per 1,000 bushels. | New charge per 1,000 bushels. |
|-------------------------------|-------------------------------|
| Grain.....\$ 5.00 | Grain.....\$ 2.50 |
| Boat.....5.00 | Boat.....2.50 |
| Vessel.....7.00 | Vessel.....3.50 |
| Blowing.....2.50 | Blowing.....1.25 |
| Total.....\$19.50 | Total.....\$9.75 |

At Buffalo grain will be transferred at one-quarter of a cent per bushel, paid by the grain vessel, canal boats paying the usual price for trimming. This plan, it is thought, will put a stop to the paying margins to thirty elevators for doing the work of eight.

THE GRAIN TRADE OF BOSTON.

The receipts of flour and oats at Boston, during the last ten years, have shown a steady increase, but the receipts of wheat were greater in 1879, and of corn in the year following. The receipts of wheat have shown a steady decline, aggregating in the earlier months of last year only one-third of those in the corresponding months of the earlier period; corn has followed a similar course, but not by so great a drop. The arrival of flour amounted to two and one-third as much in the cereal year of 1883-4 as in that of ten years previous, and of oats, two and one-quarter as much. This, says *Bradstreet's*, is in part due to fluctuations in the export trade, but to a large extent to domestic consumption, New England being mainly dependent on Boston for its supply. The breadstuffs at this point come almost entirely from the West, those from the East and South being insignificant. Four great trunk lines furnish the transportation—practically only three, as the New England road has gone out of this trade. The Boston & Albany is the outlet of the New York Central and other Vanderbilt lines; the Fitchburg freight is principally from the West Shore and Grand trunk; the Lackawanna and the Erie connect with Binghamton by the Delaware & Hudson; the main competitors are the B. & A. and the Fitchburg, who seem to hold a pretty equal portion of the trade.

The Boston exports compare well with those of the other Atlantic ports, New York holding the lion's share, more than equaling those of Boston, Philadelphia and Baltimore combined; Boston is a little behind Baltimore, but since 1881, ahead of Philadelphia. She is the only one of these three cities that has reported a gain in the last five years; the exports of breadstuffs at that port were last year over nineteen per cent. greater than in 1880, while New York showed only forty-five per cent.; Philadelphia and Baltimore respectively twenty-eight and forty-one per cent. of their exports of that year. Of the total exports of the country last year, Boston sent out 11 per cent. against 5.18 in 1880. Comparing the relative percentages of those two years at the other ports, New York's was 46.75 in 1880, against 37.42 last year; Philadelphia's, 10.06 against 5.16; and Baltimore's, 19.57 against 14.37.

Flour, as stated, has presented the most notable increase, both positive and relative. In 1880 Boston exported 11.33 per cent. of our total exports of wheat flour, and in 1884 had steadily increased to 21.54 per cent. The percentages of corn exports in 1880 were 57; in 1882, 14.08; last year, 10.49; the percentage of wheat was 2.40 in 1880, and 1.94 last year.

The credit of Boston's grain trade is principally due to the railroads, who mainly furnish the capital so used. If, says *Bradstreet's*, the merchants of that city entered into the trade as they do in New York, the relative improvement would be much greater. It is said that 90 per cent. of the grain exports of Boston pass on through-bills of lading, the capital coming from New York, because of the lower rates of shipments. This class of bills were originated in 1870 by President Bliss, then general freight agent of the B. & A. Road, and the Boston agent of the Cunard Line, the companies going so far as to buy some cargoes to give it a start; the rival cities soon adopted them; but New York, it is said, does not use them in over 25 per cent. of her exports. For eign freight agents of the Boston routes have, in fact, to charter a space in steamers three weeks in advance, there being no storage in elevators or warehouses on which they can draw, and they have to see that the grain is obtained from Chicago or elsewhere. The contrasting conditions at New York, enabling vessels to secure loads at once, are well known, while shipowners, uncertain as to the rates, are unwilling to make advance contracts. These are great advantages for the latter port. The direct water-way communication with Chicago is another matter of great value in favor of New York, while an other important advantage is the vast import trade of the metropolis which must attract that in breadstuffs and adds greatly to the value of that market.

In the matter of freight rates to Liverpool, Boston seems to have an advantage. The charges are nominally the same to the two ports on grain from Chicago, while the charges at Boston are light in contrast with its great competitor. The former has two tidal elevators in use, one of 1,000,000 bushels capacity, owned and operated by the B. & A. Road, the other has a capacity of 600,000 bushels and is owned by the Hoosac Dock and Elevator Co.; the docks and wharves are used by vessels without charge, and there are no charges on miscellaneous mer-

chandise from cars. The charges made by the elevators are 1¼ cents per bushel for the first ten days, and ¼ cent for each subsequent ten, including insurance. There are beside three or four floating elevators in the harbor, with barges that, when required, charge ¾ cent per bushel for lighterage, and there is a wharfage charge of ½ a cent for delivery at another wharf. The only charges for grain charters is a commission of 5 per cent. Boston is one day nearer to Liverpool than New York, three days nearer than Baltimore, or equal to one round-trip a year. Albert Fink, trunk line commissioner, has stated that the inland rates to Boston are really lower than to New York, and the ocean rates, as a rule, much lower.

FOREIGN TARIFFS ON GRAIN.

The German Reichstag, on Feb. 16, increased the import duties on cereals, raising that on wheat and rye from 1 to 3 marks per 220 pounds, and on flour to 7½ marks, though the government had asked only 6 marks as the limit. Bismarck was empowered to remit the duties on contracts made before Jan. 15 on account of the large amount of grain in passage. The duty on rye will not affect this country at present, as we are included in the terms of the "most favored nation," clause of the German-Spanish treaty of 1883. A certificate of origin must accompany the claim for rebate. The Hungarian Minister also wishes to follow these examples and establish a grain duty against Roumania and other Eastern states. The German imports of cereals during the last two years were, of wheat, in 1884, 7,529,000 sacks, against 6,419,000 the previous year. Of rye in the same years they were respectively 9,614,000 and 7,700,000; of oats there were 3,664,000 and 2,600,000; of barley, 4,400,000, and 3,200,000; and of maize nearly 2,000,000 and 1,780,000 sacks, of 220 pounds each. The exports were small comparatively. In general the German imports of grain have increased. Spain also desires to fall into the ranks of the protectionists; in case of the treaty now pending with this country Senor Canova has promised to pursue a "prudent" policy. The protectionists ask for an increase on the present heavy rates of \$1 per 220 pounds of wheat; \$1.60 on wheat flour, 80 cents on all other grain, and \$1.20 on flour made from imported wheat.

The Howe Scales took first premium at Philadelphia, Paris, Sydney, and other exhibitions. Borden, Selleck & Co., Agents, Chicago, Ill.

Chicago elevators contained last Saturday evening 15,881,150 bushels of wheat, 2,037,835 bushels of corn, 533,613 bushels of oats, 135,353 bushels of rye, and 50,438 bushels of barley; total, 18,638,389 bushels of all kinds of grain, against 20,976,223 bushels a year ago. During last week our stock increased 66,379 bushels, including a decrease of 23,067 bushels of wheat and an increase of 123,407 bushels of corn. For the same date the Secretary of the Chicago Board of Trade states the visible supply of grain in the United States and Canada as 46,851,232 bushels of wheat, 9,958,466 bushels of corn, 2,418,310 bushels of oats, 312,799 bushels of rye, and 755,570 bushels of barley. These figures are smaller than a week ago by 716,086 in wheat, and larger by 1,072,503 in corn.

Col. Norman J. Colman, recently appointed Commissioner of Agriculture, was born near Richfield Springs, N. Y., in 1827, and taught a public school at the age of sixteen. He established a seminary at Owensboro, Ky., in 1847; he removed from there to Brandenburg, and, after a year's teaching, to Louisville, where, besides teaching, he studied law, taking the degree of Bachelor of Law, with license to practice, finally entering into a partnership with Hon. M. C. Kerr, late Speaker of the House of Representatives, at New Albany, Ind., where Colman afterward became district attorney. He went to St. Louis in 1855, buying out the *Valley Farmer*, which he changed to *Colman's Rural World*, and has continued ever since to edit. He has been prominent in the organization of the State Horticultural Society and the Board of Agriculture, of which he has repeatedly been elected president, and of other kindred organizations, as well as the Missouri State Press Association. He was prominent as member of the legislature as a leader of his party in 1856-7, when the Drake Constitution was adopted. He was elected Lieut.-Governor in 1874. During the war he was Lieut.-Col. of the Eighty-fifth Missouri militia. For twenty years he has been an intimate friend of Prof. C. V. Riley, Entomologist of the Department of Agriculture.

ELEVATOR AND GRAIN NEWS

Washington, Ind., needs an elevator.
Northwood, Dak., is to have a 100,000-bushel elevator.
Funk Bros., of Canton, Kan., have sold their elevator at that place.

Margin money on breadstuffs is piling up pretty fast in the banks.

Ben W. Hope & Co., grain exporters of New Orleans, La., have suspended.

Cairnes & Hall, grain dealers of Butler, Mo., have sold out to W. M. Wilson.

Cattell & Munn, grain brokers of New York City, have dissolved partnership.

The new railroad and grain inspecting bills of Minnesota, go into effect May 4.

W. N. Potts & Co. are about to build a 30,000-bushel elevator at Richmond, Ky.

An elevator is to be built at Otisville, Mich., to cost between \$12,000 and \$15,000.

Calvin Fender has sold out his grain business at Spencer, Ind., to J. D. Everly.

Hubbard & Co., grain commission merchants of Kansas City, Mo., have suspended.

Graham & McCafferty, grain dealers, Pueblo, Col., have closed out their business.

M. McBride, lumber and grain dealer, Richland, Neb., has sold out his grain business.

Australia's crop of wheat, just about to be marketed, is 12,000,000 bushels for export.

Out in Missouri some farmers are selling their new wheat crop at \$1.50 an acre cash.

The creditors of the Minnesota Elevator Co. are being paid 15 per cent. on their claims.

R. C. Crowell & Co., grain commission merchants of Kansas City, Mo., have suspended.

The Albert Lea Milling Co., Albert Lea, Minn., are contemplating building an elevator.

The new Union Elevator at Minneapolis, Minn., is being rapidly pushed to completion.

Charles W. Blood, of Tilton, N. H., has sold his grist mill and grain business to A. H. Brown.

Thomas & Cook, grain dealers of Sandusky, Ohio, have dissolved. Frederick W. Thomas succeeds.

The commission firm of Branson & Knowles, of Indianapolis, Ind., have dissolved partnership.

Morris H. Cropper, grain commission merchant of this city, has suspended. Liabilities about \$20,000.

The grain firm of C. N. Baylor & Co., of Boulder, Col., have dissolved partnership, M. H. Deitz retiring.

Walker, Fiske & Co., grain commission merchants of Toledo, Ohio, have dissolved. W. T. Walker continues.

W. D. Rinehart, of Terre Haute, Ind., has sold two sets of his roller mills to G. L. Gilbert, of Staunton, Ind.

Ball & Toren, grain dealers of Des Moines, Iowa, have dissolved partnership. Mr. Ball continues the business.

D. M. Coffin, of Homer, Ill., is about to build an elevator in connection with the mill he is building at that place.

It is thought that from 60 to 75 per cent. of the surplus corn has already been marketed from the best corn regions of the West.

U. G. Hawbecker has leased the warehouse, lumber and coal yards, etc., of S. Z. Hawbecker, at Williamson, Franklin Co., Pa.

The Cincinnati, Hamilton & Dayton Railroad Elevator Company, of Toledo, Ohio, has been incorporated. Capital stock, \$250,000.

The bucket-shop proprietor at Elkhart, Ind., is missing. It was reported that he was short in wheat. He left many creditors.

Outside parties are buying wheat in this market, and the inside longs are unloading. It will soon be seen which party is right.

The non-speculative grades of wheat, No. 3 red winter and No. 3 spring, have risen more in price here than the speculative No. 2 wheat.

The Frost Mfg. Co., Galesburg, Ill., are furnishing White & Leacock, DeWitt, Neb., a 20-horse power engine and a complete elevator outfit.

Mr. J. M. Davidson, superintendent of the Jamestown Elevator Co., Jamestown, Dak., has consented to become a candidate for the office of mayor.

The inspection of wheat in this city during March was 250 cars of winter and 3,085 cars of spring, against 353 of winter and 1,041 of spring last year.

It is now fourteen years since the General Assembly of Illinois, in the prompt exercise of its powers under the constitution of 1870, passed a warehouse reform act.

From a business point of view that was one of the most

important bills ever enacted at Springfield, and it has been millions of dollars in the pockets of the grain-raisers of the Northwest.

The Blatz Brewing Company, of Milwaukee, Wis., will erect a brick and stone elevator in addition to their present plant. Estimated outlay, \$50,000.

A. B. Brant has just ordered of Dickey & Pease, of Racine, Wis., one of their Patent Giant Dustless Grain Separators for his grain house in Tiffin, Ohio.

The Whole Grain Press Co., capital \$57,000, has been organized at Covington, Ky., by S. Kuhn, Geo. F. Adlers, and Julius Frieberg, to engage in manufacturing.

The Lake Superior Elevator Co. will build two large warehouses at Duluth, Minn., the coming summer. J. S. Moulton, of this city, will superintend the construction.

J. Hubler, a prominent grain speculator of Portland, Ore., who became insane over heavy losses, has been released from the asylum as cured, but has again disappeared.

N. I. Gorsuch & Co., of Westminster, Md., write us that they have decided to build a small elevator of 12,000 or 14,000 bushels capacity, and with storage capacity for some three or four cars of bran.

Stamwitz & Schober, proprietors of the "Phoenix Mill," at Minneapolis, Minn., have bought a lot adjoining their mill, 44x247 feet, upon which they contemplate erecting an elevator of good size.

The elevators of the Minnesota Elevator Co. are rented until next October, and until the lease expires the new company, organized from the creditors of the old company, may not have them to operate.

Mr. D. H. Wheeler, the official statistician for Nebraska, has just made a report of the stocks of grain on hand in that state. The figures are 80,718,791 bushels of corn and 9,737,764 bushels of wheat.

T. Brigham Bishop & Co., extensive grain dealers of New York City, have made an assignment to E. Puffer. The assets and liabilities were not estimated. This firm has sixty-seven branches, and all have not yet been heard from.

The State Protection Grain Elevator Company, Limited, of New York City, has been incorporated. Capital stock, \$75,000. Incorporators, Melvin De Puy, Chas. Hamilton, Matt McCormick, Howard Steller, and Joseph Accles.

A company of local capitalists are about to build a mammoth elevator at East Minneapolis, Minn. It will have a capacity of 1,500,000 bushels, and an unloading capacity of 200 cars per day. The building will be 93x337 feet.

The Memphis Grain Elevator and Mfg. Co. has been organized at Memphis, Tenn. John K. Speed, W. J. Chase, Louis Hanauer, Napoleon Hill, J. C. Neely, and Robert Galloway are the incorporators, and the capital stock is \$65,000.

This season the acreage of flax in Dickinson Co., Iowa, is greatly increased. About 5,000 bushels of seed have already been sold in Spirit Lake. This will seed about 7,000 acres. The average yield is eight to ten bushels per acre.

The elevator at Melette, Dak., built by the farmers, has proved a success. Since Oct. 15 80,000 bushels of wheat have been handled, which netted the farmers from three to five cents per bushel above the price paid in the surrounding markets.

The Illinois Senate Warehouse Committee has under consideration a bill providing that any district which can handle 3,000,000 bushels of grain annually may take advantage of the law regulating warehouses and the inspection of grain.

To-day (April 15) closes the season of winter storage on grain in this city. The rate will afterward be 1 1/4 cents for the first ten days, and 1/2 cent per bushel for each succeeding ten days or part thereof, that the grain may remain in store.

G. W. Van Dusen & Co., of Rochester, Minn., are sending some of the large flax cleaners, manufactured by Dickey & Pease, of Racine, Wis., to their elevators in Dakota. These are mills which are very much needed in that section just now for taking mustard seed out of Russian flax. They have large capacity.

There is in store and afloat in the harbor here 4,005, 130 bushels of corn. About all of it has been sold for May and June delivery in New York, and will be forwarded when navigation opens. This fact, and the knowledge that very little is cribbed at railroad stations, has given rise to the rumors of a squeeze in May corn.

A good many small lines of shorts sold at 40 cents are still out, and the sellers refuse to cover. As the long futures command a good premium, the market does not as yet show signs of manipulation. The best informed operators say that should there be a squeeze it will be on the shorts who at present refuse to cover.

The Kansas Lyre, of Rossville, Kan., gives a graphic account in detail of the confidence game of a grain dealer claiming to come from Cincinnati, Ohio, and having ample funds deposited in the First National Bank of Topeka; he bore the name of J. H. Dukehart. He contracted with E. S. McClintock for his mill, offered to pay the highest market prices for grain and succeeded in getting a carload of wheat from Franklin Bros., which he shipped to Kansas City, going himself in advance. As he failed to make any payments, McClintock investigated the bank account and found it a canard. This started a pursuit of the dude grain mer-

chant; the wheat was recovered at a loss of some \$50; Dukehart made terrific efforts to obtain money, with abundance of stories elucidating his difficulties; he finally slipped away by night train to Topeka, where he bilked the Dutton House of its bill, and was finally fired out into total obscurity.

According to a Board of Trade firm, the present situation in corn from the supply standpoint is this: Practically no shelled corn in country warehouses; comparatively little in cribs at stations; prospective very small farmers' deliveries until after sowing and planting, say about May 15; very small visible supply.

Speaking of the claim that Manitoba will soon become the "granary of the world," a California paper says: "With the consumption of the world over two billion bushels, and the imports of Europe over two hundred million bushels, we are told that a piece of territory containing little if any more arable land than the Pacific coast states, and situated midway between oceans on the broadest part of the continent, is soon to be the granary of the world. Could a statement well be more absurd? And the absurdity is made more emphatic by the prospective surplus five years hence of this 'granary of the world' being placed at only fifteen or twenty million bushels, or less than one-half the amount now shipped from California alone, and just about enough to supply the people of the single city of London."

Chas. Kaestner & Co. are building for the Standard Cement Company, of Hartford, Conn., two patent cement grinding mills, and have recently shipped to the Utica Cement Company, at Utica, Ill., another of their mills. The firm is in receipt of orders from the Denver Brewing Co., Denver, Col., Messrs. Hunning & Son, St. Joseph, Mo., Weisenhorn & Voegt, Boulder City, Col., Wm. Banholzer, St. Paul, Minn., A. Young, Jr., St. Paul, and the Fountain City Brewing Co., Fountain City, Wis., for brewers' outfits or supplies. The firm is now building for J. W. Walker Bros. & Co., Cincinnati, an improved fan putty mill, and has further shipped patent portable grinding mills during the past week to E. P. Allis & Co., Milwaukee, Wis., J. O. Kendall, Hartford, Wis., C. August Miller, Harmony, Minn., Butler & Ober, Galva, Ill., A. Pope, Elkhart, Ind., and J. W. Flory, New Berlin, O.

During the past four months about 60,000 centals of rye have been shipped from the ports of California, and in addition there are probably 20,000 centals now on shipboard, or ready to be loaded; all this grain is for Germany. This is small as compared with wheat; but it is only recently that California has changed from an importer to an exporter of rye. The recent increase of the German duty on this cereal nearly treble its former rate, which the treaty with this country, under the "most favored nation" article, gives to 1887, for application to our rye shipments. There are some other nations included in the same category; but the prominent rye producers, Russia and Denmark, are immediately affected by this change. Germany is a large consumer of rye; the duty has been about 11 cents per cental, and has been raised to about 33 cents, so that during the next two years American rye will obtain 22 cents per cental more from German importers than those nations not thus favored.

GRAIN PRICES IN 1884.

The following table shows the lowest and highest and opening and closing prices monthly during 1884 in Chicago of cash No. 2 spring wheat, No. 2 corn, and No. 2 oats. In the columns showing opening and closing, the first figures are the opening and the lower ones the closing prices:

| | Wheat, No. 2 Spring | | Corn, No. 2. | | Oats, No. 2. | |
|-----------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|
| | Lowest and highest | Opening and closing | Lowest and highest | Opening and closing | Lowest and highest | Opening and closing |
| January | 88 1/2 95 1/2 | 93 3/4 92 1/2 | 51 57 1/2 | 54 1/2 52 1/2 | 31 1/2 33 1/2 | 32 1/2 32 1/2 |
| February | 90 1/2 96 | 91 1/2 93 1/2 | 52 55 | 52 52 1/2 | 32 33 1/2 | 32 33 1/2 |
| March | 82 83 1/2 | 92 1/2 86 1/2 | 49 1/2 54 1/2 | 53 1/2 54 1/2 | 29 1/2 33 1/2 | 31 1/2 29 1/2 |
| April | 76 94 1/2 | 85 1/2 92 | 44 1/2 56 | 54 53 | 26 1/2 34 1/2 | 29 31 1/2 |
| May | 85 94 1/2 | 92 1/2 89 | 52 1/2 57 | 53 1/2 55 1/2 | 30 1/2 33 1/2 | 31 1/2 31 1/2 |
| June | 83 1/2 89 1/2 | 89 1/2 86 1/2 | 51 1/2 66 1/2 | 55 51 1/2 | 30 1/2 35 1/2 | 32 30 1/2 |
| July | 79 1/2 84 1/2 | 83 82 1/2 | 49 1/2 56 1/2 | 50 1/2 55 | 28 1/2 34 | 29 1/2 31 |
| August | 76 1/2 83 | 83 79 1/2 | 50 1/2 55 1/2 | 55 1/2 52 1/2 | 24 1/2 30 1/2 | 30 1/2 25 1/2 |
| September | 73 1/2 79 1/2 | 79 1/2 78 1/2 | 51 1/2 87 | 51 1/2 87 | 24 1/2 26 1/2 | 26 1/2 25 1/2 |
| October | 72 1/2 79 1/2 | 78 1/2 74 1/2 | 51 1/2 59 1/2 | 57 1/2 42 | 25 1/2 27 1/2 | 25 1/2 25 1/2 |
| November | 71 1/2 74 1/2 | 74 1/2 74 | 53 1/2 45 | 41 1/2 35 1/2 | 25 1/2 26 1/2 | 25 1/2 25 1/2 |
| December | 69 1/2 76 1/2 | 73 1/2 75 1/2 | 34 1/2 40 1/2 | 34 1/2 34 1/2 | 23 25 1/2 | 25 25 1/2 |
| Year | 69 1/2 96 | 83 1/2 87 | 41 1/2 87 | 55 1/2 34 1/2 | 23 34 1/2 | 25 34 1/2 |
| Average | 82 1/2 | | 51 1/2 | | 29 1/2 | |

NOTES FROM THE EXCHANGES

Chicago Board of Trade memberships are selling at \$2,900.

Memberships on the New York Produce Exchange are selling at about \$3,000.

The United States Government has purchased the old Produce Exchange Building at New York for \$250,000, subject to the approval of Congress.

The Boston Produce and the Commercial Exchanges are to be consolidated. This is a wise move and will result in good to the business interests of that city.

The offices in the new Chicago Board of Trade Building are expected to bring an annual rental of \$125,000, of which \$118,350 have already been secured. Only a few rooms remain for rent.

Many of the oldest commission houses in this city are gradually working out of the grain-receiving and into the option business exclusively. This has a tendency to concentrate the receiving trade in a few hands.

Speaking of the investigations of the chief grain inspector, a member of the Chicago Board of Trade said: "The inspection bureau as it is now being conducted is the best possible arrangement we have ever had, and if that miserable body down at Springfield attempts to meddle with it the Board of Trade will repudiate state inspection and inspect their own grain, as is done in every other state but Illinois."

The Committee of the Gratiuity Fund of the N. Y. Produce Exchange recently announced that they had completed the report of the third year of their work, the deaths being 40 against 38 in the preceding year. The family of each deceased member received last year \$4,000, and will this year receive \$5,000, and payments being the same, \$3 for each death. There are 2,887 members out of the 3,000 in all, and the surplus is nearly \$650,000.

A fresh petition is to be circulated to amend the hours of business on the Chicago Board of Trade when it moves into its new quarters, so as to have a continuous session from 9:30 A. M. to 2 P. M. This is the only grain and provision exchange in the country, it is said, that takes one of the best trading hours of the day in which to stop business and go off and get dinner, and it is felt that a change in this respect is greatly needed, so that Chicago can conform to the prevailing custom elsewhere.

The twenty-seventh annual meeting of the Milwaukee Chamber of Commerce was held on April 13. The average receipts for two years exceeded the average expenses. The annual report of the directors stated the facts as to the efforts to reduce terminal charges and transfer expenses on grain, that there was a continued diversion of the trade, especially in coarse grains, to Chicago, on account of the inequalities of charges, while other inequalities in the freight charges, from intermediate points to these two markets, were operating to the disadvantage of Milwaukee. A committee had been appointed to call the attention of the roads and elevator men to this matter, which had resulted in large reductions; these, though not entirely such as the committee desired, had proved very acceptable, benefiting the trade and giving promise of more liberal course in future on the part of these parties.

The new building of the Chicago Board of Trade is so nearly completed that a comparison may be made with the old quarters that are being vacated. The architect, Mr. Boyington, has said that the old hall might be set down in the new and leave room for a wagon and four horses to drive around it. This seems to be sustained by the fact that if the old room was placed with its north end to the east, there would be a space between the two at each end of twelve and a half feet, and of thirty-one feet at the sides. If the rooms were placed in their present position, while there would be only a space at each end of two and a half feet, there would be a space on each side of thirty-six feet. The area of the new hall is 165x145 feet, or after subtracting 1,600 for notches at corners, an area of 22,325 square feet, while that of the old hall is 13,025 square feet. There is besides a space of thirty-eight feet or forty under the great sky-light, in addition to that of the old hall. The cubic contents of the two halls are respectively 546,840 and 1,786,000 cubic feet.

The great clock on the Chicago new Board of Trade building is made of bronze, iron and steel, and weighs two tons without the bell, which weighs 4,000 pounds more. The pendulum weighs 750 pounds. Following the Westminster clock of London, Eng., the works are divided into time, hand and striking trains, which are separate machines, resting side by side on separate frames; the time train registers the time; the hand train generates the force moving the hands on the various dials, and the striking train the force that strikes the bell; both the latter are set off by the time train. The patent hammer weighs 80 pounds; the clock work below the dials are ten feet ten inches in diameter, and the bell is above them; all are 250 feet from the ground. The note which the bell strikes is C, an octave below the staff. On account of hotel residents, the bell will be silent from 9 o'clock P. M. till 6 A. M. The manufactur-

ers are the same that made the clock of Dr. Tyng's church, in New York, that has run without stopping for twenty-five years, and they anticipate that the Chicago clock will run twice that length of time. It is styled as to movement "No. 20," the same as the one in Independence Hall, Philadelphia, made by the same firm, but having some improvements on the latter clock.

Fires, Casualties, Etc.

A. L. Stevens, grain dealer, of Leavenworth, Kan., is dead.

W. H. Bolton, grain and feed dealer, of Baltimore, Md., died recently.

Frank North, of the firm of North Bros., grain and lumber dealers, Columbus, Neb., died recently.

Field & McMahon, grain dealers of Canastota, N. Y., were damaged by fire recently. They were insured.

During the year 1884 there were eight boiler explosions in elevators and flour mills in the United States.

A. A. Skinner, of Logansport, Ind., a well-known grain merchant, accidentally killed himself while cleaning a shot-gun recently.

S. K. Russ, a grain speculator of New Orleans, recently, soon after the announcement of the advance in wheat, expired; the immediate cause was thought to be apoplexy.

The warehouse of J. S. George, at Port Elgin, Ont., Can., was destroyed by fire March 23, together with a large quantity of grain and flour. Loss, \$18,000; insurance, \$11,000.

Salve Hanson, a man employed on the new Union Elevator, at Minneapolis, Minn., was run over and killed March 19 by a train on the Manitoba Road, while returning home at night from his work.

The elevator and grist mill of Weigner & Weigner, at Kahoka, Mo., was burned March 30, together with 2,500 bushels of grain. Loss \$7,000, with no insurance. The fire was supposed to be incendiary.

The grain warehouse of G. W. Van Dusen & Co., at Oshawa, Minn., was burned recently. It was valued at \$300. It contained 300 bushels of wheat belonging to the L. C. Porter Milling Co., of Winona, Minn.

A fire broke out on the morning of April 11 in the drying room of the starch factory of Samuel Cutsinger & Co., at Edinburg, Ind., destroying the entire establishment and the adjoining stables. The loss was \$75,000; insurance, \$50,000.

Early in the evening of April 10 a fire occurred in the top story of the Wabash Grain Elevator, corner of Forty-second street and the Wabash tracks, Chicago, Ill. Very little damage was done, and there is a mystery as to the origin of the fire, as the house, owned by Johnson & Clinton, had been for some time vacant.

Schenk's warehouse at Vevay, Ind., burned on the night of April 1, containing a large amount of hay and other products. The loss was \$15,000; no insurance. At the same time, Pleasant's warehouse, at same place, was burned with a large quantity of grain, etc. The loss was \$15,000; insurance, \$8,000. The fire was thought to be caused by incendiarism.

PROPERTY IN STORED GRAIN.

A subscriber in Michigan lately submitted the following case: He had several thousand bushels of wheat stored in a warehouse. The warehouseman bought and sold and shipped out, and finally covered what grain remained in his possession by a chattel mortgage, and made an assignment. Had he any property in the grain remaining?

This makes a complex subject for adjudication by a court; but there are some points suggested that millers and all who store grain with other parties should know. The courts have repeatedly held that when receipts are issued for grain by a warehouse or elevator, and the grain loses its identity, the receipt calling for a certain amount of a specified grade or variety, when loss occurs through fire or fraud, the holder of a receipt need not prove the identity of his grain, but that the holders of such receipts, in case all come in under a common arrangement, are entitled to share pro rata. The warehouseman cannot shield himself by the plea that any one man's grain has been shipped out or disposed of, and that what he has left is his own or somebody else's; but the grain remaining is subject to levy under judgment the same as other property. In a case like the one noted above, delays are dangerous, and the safest course is to consult a lawyer and get in first: if some one is to be left behind it is best to let some one else occupy that position.—*American Miller.*

Twenty-five years ago farmers in this country apprehended that the boundless plains of Southern Russia, with soil practically inexhaustible, would monopolize wheat growing to the exclusion of our own product. It was said very plausibly that we could not compete with the cheaper labor of the Russian serf. We do not hear much about Russian wheat production now.

Canals and Marine.

The amount of grain afloat in this port is over two million bushels.

Grain freights from Chicago to Buffalo are now 3 cents for corn and 3½ cents for wheat.

The growth of the Lake Superior Trade has far exceeded the expectations of the government engineers. In the last annual report of the Secretary of War, it was estimated that the full capacity of the present lockage system at Sault Ste. Marie would not be reached in eight years, but judging from the present ratio of increase of the volume of traffic, the locks will be unable to perform the service required in less than one half the allotted period. During the year of 1883 vessels aggregating 2,042,295 registered tons passed through the canal. Only 11 per cent. of these were of sufficiently light draft to admit of their passing through the old locks. Prior to 1883 the annual increase in tonnage for fifteen years had been quite uniform, averaging 107,313 tons a year. Complete returns for the season of 1884 show that the annual increase in tonnage has not only been maintained, but largely exceeded. The report of Superintendent Spalding shows that the registered tonnage passing through the canal from the opening to the close of navigation last year aggregated 2,997,837 tons, an increase of 955,578 tons, or nine times the average annual increase for the preceding fifteen years. This increase in 1884 is equal to the entire commerce through the canal during the first five years it was open to navigation.—*Inland Marine.*

The Erie Canal boatmen are endeavoring to change the entire system of boating by the organization of a stock company, which shall embrace nearly, if not quite, every boat-owner on the canal. It is claimed that under the present system, where each boatman owns his horses or mules, as the case may be, the cost of towing is about twenty-three cents per mile. This conclusion has been reached by responsible men who have kept track of every item of expense in connection with that part of the business. By the proposed scheme it is thought that the work can be done for ten cents per mile, a saving of thirteen cents per mile, or \$70 each trip. The capital stock of the company will be \$87,500, in shares of \$50 each. Along the line of the canal will be thirty-five stations, each having eight towing teams, in charge of competent men. Any owner who wishes to become a stockholder must subscribe for at least five shares. If desirable, he can hand over his mules, harness, and other towing appurtenances to the company, for which he will receive the equivalent in stock, at the appraisal of the company. The boats will be towed from station to station, making a much easier and quicker trip than by the old system. A license has been procured from the Secretary of State for forming the company, and when half of the stock is taken applications will be made for a charter.—*Inland Marine.*

THE GOVERNMENT FIGURES.

The Report of the United States Department of Agriculture for April 10 states that the decrease in the acreage of winter wheat, is over 10 per cent. compared with last year, amounting to some 3,000,000 acres. The only state not so decreased is Oregon. The state percentages are, 22 in Kansas and Virginia, 20 in Mississippi, 15 in California, 14 in Alabama, 12 in Missouri, Illinois, and Tennessee, 11 in New York and North Carolina, 10 in Maryland and Texas; 8 in New Jersey, West Virginia, Kentucky, and Indiana, 7 in Georgia and Ohio, 6 in Pennsylvania and Delaware, 5 in Michigan, 3 in Arkansas, and 2 in South Carolina.

The present condition of wheat, as reported, is worse than in 1883. It is 77 per cent. against 96 last year and 80 in 1883. In 1881 the year of lowest recent rate of yield, the condition, April 1, was 85, and serious loss was sustained afterward. The real status of the crop will be better shown a month hence, when the vitality of the roots has been demonstrated and the character of the spring determined. On the present showing the reduction of yield on the basis of last year's production promises to be nearly 40,000,000 bushels on account of reduced area, and more than 60,000,000 from winter killing and low vitality. Whether the crop will exceed 400,000,000 bushels or fall short of it depends upon the reliability of present appearances, and on future conditions affecting growth and ripening. The soil was in bad condition at the time of seeding on the Atlantic coast from New Jersey to Georgia, and in West Virginia and Tennessee. It was better in the Southwest, Missouri, Illinois, and Michigan. In the Ohio valley it is scarcely in a medium condition. Damage by the Hessian fly was not severe, though worse in Indiana, Illinois, Missouri, and Kansas, where injuries have occurred in three-tenths of the reported territory. The acreage of rye has been decreased in about the same proportion as wheat, but the condition of the crop is decidedly better, the average being 87 per cent.

A good deal of stuff has been bought in Chicago the past ten days for export.

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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

INVESTIGATING THE GRAIN INSPECTOR.

A committee appointed by that body which has done so much to secure deep and universal respect since the commencement of the present year, the Illinois Legislature, has been investigating Mr. Frank Drake, the Chief Grain Inspector of this city.

Mr. Frank Drake may be a very bad man, and in need of investigation. Evidence shows that politics, in some measure, governed some minor appointments; but unless we read the evidence wrong, and misinterpret the general verdict, Mr. Drake has made an excellent and satisfactory officer—so far as any one can fill so trying a post satisfactorily.

But Mr. Drake has the misfortune to be a politician, and has, on some notable occasions, come in conflict with certain other politicians of Chicago. They were not after Mr. Drake's scalp because he was grain inspector; they simply wished to hit him hard so as to down him for the assessorship.

If Mr. Drake has been guilty of malfeasance let him be bounced forthwith. But let it also be remembered that a disreputable gambler is the man behind the scenes that has been pulling the strings of the investigation. That fact ought not to tell in Mr. Drake's favor if he is proved incapable or dishonest. The investigation was not prompted by partisan malice, much as the newspapers tried to make it out so; it was simply a move by a gamblers' ring to control the assessment of property in the South Town of Chicago, and to do this it was necessary to beat Mr. Drake. That was all there was to it.

TAXES ON THE CHICAGO ELEVATORS.

Reviewing the records of the county clerk's and treasurer's offices as to the taxation of property in this city, the *Inter-Ocean* comes upon the matter of the elevators, which, as it thinks, are shirking their fair proportion of the expenses as badly as the much belabored railways, with their abbreviated value assessments. These twenty-seven elevators of Chicago represent vast wealth and power in the traffic in grain, handling millions of bushels, and setting in fact the prices of the cereals in the markets of the world. Their combined capacity is 27,000,000 bushels, each representing in cost of construction from \$75,000 to \$500,000, and are a fruitful source of revenue to the owners. The storage charges during the summer months are 1½ cents per bushel for the first ten days, and ½ a cent for each succeeding ten

days. The writer takes a just estimate of the value of these mammoth houses to be \$10,000,000; but the assessments of the clerk's office in 1883 were only a trifle over \$980,000, or less than ten per cent. The writer then goes into a detailed list of the taxes of the various owners of these elevators, and shows that the total paid in the year mentioned amounted to only \$50,395, while their earnings aggregate \$405,000 for ten days when full. The taxes paid to the city by the combined railway companies aggregate only \$116,000 on real estate and personal property, so that the *Inter-Ocean* says the heavier burden of taxation falls on the small holders of land, assessed at one-third its actual value, which is often greatly exaggerated.

THE NEW YORK ELEVATOR CONTROVERSY.

Elsewhere in this issue are some further voluminous contributions to the discussion of elevator charges in New York City and Buffalo. *Bradstreet's* presents a formidable array of figures with the purpose of showing that the charges at New York are not exorbitant, at least to the extent of driving trade away from that port. We gave the other side of that question pretty fully last month. Before a committee, Franklin Woodruff and A. E. Orr said that elevator owners in that port couldn't reduce grain elevating charges and make their business pay any profit at all. Mr. Orr said that last year and this year so far his big Brooklyn storage elevators hadn't earned enough to pay the city taxes on them even. He said the canal boatmen were unfair in their recent arguments to the committee, and that it was manifestly unjust to compare New York's charges with those of Chicago, Duluth, and Montreal, because all the grain elevators there were stationary and not floating, as in New York, and consequently cost less to operate.

On the other hand, the canal men have formed a stock company for the purpose of building floating elevators at Buffalo and New York, and a bill has been introduced into the legislature to authorize the erection and management of elevators at these points by the state. Whether these measures have been taken to frighten off the lobby said to be working in the interest of the elevator men, or owe their conception to downright earnestness, remains to be seen.

A DECISION OF IMPORTANCE TO ELEVATOR MEN.

Judge Smith of this city, on April 15, gave his decision in the case of Everingham & Co. vs. Vincent & Co., which is of great interest to grain men. On May 10, 1882, the plaintiffs bought of Eggleston & Co. a warehouse receipt for 5,000 bushels of No. 2 spring wheat, which they presented the same day to the defendants, receiving an order for delivery of cars for the shipment of grain to Milwaukee on the Northwestern Railroad. On loading 900 bushels at elevator on May 12, the inspector found signs of heating and refused to pass the grain, which was posted the next day, but was taken by Everingham & Co., with the agreement that it should not prejudice any claim for damages. The suit was brought under the claim that, at the time of purchase and delivery, the grain not having been posted, the defendants were obliged to deliver wheat not posted.

The defense showed that the winter of 1881-2 was unusually open and wet, that they had repeatedly turned the grain over, and during the whole winter in which grain in Chicago elevators was suffering from wet, had taken every pains to prevent heating. On April 27 they posted 46,000 bushels, leaving 23,000 not posted, from which the above delivery was made. The warehouse act provides that no damages shall accrue against elevators using proper care in preventing heating. The court held that warehouse receipts are negotiable, and actually transfer the property so covered; that when the warehouseman finds injury is going on he is to post the fact; but not

his simple fears of such a consequence, as it might injure unjustly the repute of grain in store. Judge Smith held that in this case all reasonable means had been pursued to save the grain, with due legal posting, and that the receipt holder, as far as the warehouse was concerned, was bound to take the grain as found in the elevator. Judgment was rendered in favor of defendants. The remaining 18,000 bushels in store were sold as full grade wheat.

THE ILLINOIS GRAIN INSPECTION LAW.

The anomaly of the control of the traffic and inspection of grain at the point in Illinois only second in importance to that of Chicago, East St. Louis, being entirely during its whole existence under the control of another state, has been fully discussed from time to time in our pages. The matter has acquired a renewed interest, however, owing to the fact that the state control is again mooted at Springfield, where a bill is before the legislature creating a board of inspection at that point under the laws of the state to which it belongs. Our contemporary, the *St. Louis Miller*, presents very clearly the reasoning of that grain center, whose capital and business energy are almost wholly in possession of East St. Louis, adverse to this section. This Illinois receiving grain point of the lower valley is only supplemental to that of the city at the end of the bridge whose Merchant's Exchange controls the inspection and sale of the grain which forms a large proportion of her cereal exports.

In reviewing the state of this question the *Miller* says that it is wholly due to the jealousy of Chicago with no features of advantage but many of general injury to the trade. The standards of the two markets are entirely different, and in case of the passage of the act would entail the expense of double grading, as all this grain finds its market in the Western city; this would confuse the grades abroad and hopelessly injure their present high reputation. The writer makes a comparison with the character of the grading of Chicago and St. Louis as shown in the official reports of 1883 and 1884. The total number of cars received in the former city in the first year named was 235,213, and in 1884 was 210,822, a falling off of nearly 25,000 cars. Of these reinspection was called for in 8,349 in 1883, and in one per cent. in 1884. Of the first Chicago lot 961 cars were taken to the Committee of Appeals of which 663 were changed to a higher grade. In St. Louis the number of cars received in these years were respectively 80,832 and 87,697, a gain of nearly 7,000. Only five were appealed in 1883, all being sustained; the following year eight cases were appealed, six being sustained.

In his report of 1883, Chief Inspector Drake, of Chicago, stated that the most common cause of complaint was lack of uniformity of grades; to relieve this he had inaugurated semi-monthly meetings of the inspectors at his office to compare notes. St. Louis, the writer says, has no complaints made in this direction, while the meetings of sub-inspectors at the office of the chief are daily. The grading of corn is also compared at the two markets with marked discredit of the lake city. Of the present crop, the *Miller* says that 75 per cent. at Chicago is graded No. 2, against 10 per cent. in the rival city, while the latter has given perfect satisfaction to dealers and shippers. Count A. Zichy, of Hungary, is reported as so well pleased with that system on his late visit, that he said he should commend it to his government.

An example of honest merit in goods and business-like methods of doing business is afforded by the history of the Barnard & Leas Mfg. Co., of Moline. Just notice the list of standard elevator machines printed in their advertisement and then recall how the firm has grown from small beginnings along about war time until now they have a magnificent establishment, a magnificent business, and the fame that true worth and fair dealing always bring.

Editorial Mention.

WARS and rumors of wars.

THE war news has made the floor of the Chicago Board seem like old times.

GEO. W. GARDNER, a grain elevator proprietor at Cleveland, Ohio, was elected mayor of that city by a good round majority.

GOV. HUBBARD, of Minnesota, has chosen S. S. Murdock, of Swift county, and Geo. L. Becker, of St. Paul, as Railroad Commissioners.

MR. JOHN TONTZ, of Girard, Kan., writes us: "Please send your paper, as I want to take it right along. I expect to be a subscriber as long as I continue in the business."

WE are indebted to Messrs. F. W. Commons & Co., grain commission merchants of Minneapolis, for a copy of the Annual Report of the Trade and Commerce of that lively young metropolis.

THE discussion of the Elevator Bills in the New York Assembly has been productive of some very lurid language. One member said that the elevator ring was "a gigantic monopoly that ought to be strangled by the state."

MR. A. B. COLTON, representing the Frost Manufacturing Co. of Galesburg, Ill., honored us with a brief visit. Mr. Colton said his firm was doing a good business in engines and elevator supplies, with good prospects ahead.

INTERESTED parties should note the card of M. Halliday, 218 E. Ninth street, New York City. Mr. Halliday is sole proprietor of Dugan's Patent Slate and Standards for snow guards, etc., which can be attached to all kinds of slate and slanting roofs.

ELEVATOR men will notice the card of Messrs. Auld & Conger, of 100 Euclid avenue, Cleveland, Ohio. They either contract to put slate roofing or siding on an elevator or other buildings, or furnish the material at any railway point in the country.

J. H. FORNEY, commission merchant at Baltimore, writes, in renewing his subscription: "The subscriber awaits the arrival of the AMERICAN ELEVATOR AND GRAIN TRADE with great impatience, and would not be without it for ten times its cost."

THE jump in grain played havoc with the bucket shops. They have been tumbling all over. One thing that a bucket-shop cannot stand is a marked drop or rise. They are based on the idea of a reasonably uniform market, and the commissions form their profit.

FOR once, Chicago and St. Louis are working in the same harness, for the same object—to defeat the bill in the Illinois Legislature providing for inspection at East St. Louis and South Chicago. St. Louis is afraid of East St. Louis and Chicago is afraid of South Chicago.

It is always a pleasure to speak a good word for a standard machine and a sterling firm, and such are the Stilwell Patent Lime Extracting Heater and its makers, the Stilwell & Bierce Mfg. Co., of Dayton, Ohio. At one time the success of this heater invited infringements, which were promptly suppressed, however, and ever since the Stilwell Heater has enjoyed success everywhere where steam users are enlightened

enough to see the danger, or at least the fuel cost of scale, and to guard against it. This firm have also made a name as manufacturers of water wheels and mill machinery, all of which, like their heater, is in the front rank.

IF war is actually undertaken by England and Russia, and the squadrons of the latter put a hermetical seal on the outlets for Russian grain, everybody in Europe will suddenly discover that American grain is cheap at ruling prices. But they haven't got to fighting yet—at least only ten cents' worth.

A DEVICE which will be new to some of our readers is advertised on another page. We refer to the new method of elevator driving, patented by Mr. Chas. Esplin, of Minneapolis. It has features which elevator and mill owners will appreciate, while the cost is moderate compared with advantages which Mr. Esplin claims.

IN a special article printed on another page "W. T. S." deals with some vital subjects in which every Western and Southern man, or rather, every American ought to take a deep interest. The writer is one who has devoted many years of thought to the subject of American commerce and has always been enlisted in the war of progress.

A DESERVEDLY popular device is the Flexible Grain Spout for trimming cars, made and sold by Messrs. H. Sandmeyer & Co., of Peoria, Ill. It is adapted to any sort of an elevator and saves a deal of shoveling in trimming cars. Messrs. Sandmeyer & Co. also also manufacture other specialties, some of which are enumerated in their card.

AMONG the firms that cater particularly to the elevator trade is the Lennox Machine Co., of Marshalltown, Iowa. They manufacture engines, boilers and general mill and elevator machinery supplies, besides doing repair work. They pride themselves on the substantial character of their work, and solicit a fair share of the public's patronage.

C. W. JOHNSON, of Kankakee, Ill., paid us a pleasant visit the past month, and also renewed his subscription. Mr. Johnson is the active Secretary of the Grain Dealers' Protective Association, which he reports to be in a flourishing condition. Mr. Johnson is interested in the new transfer elevator at Kankakee, particulars of which are given on another page.

THE "Old Canal" claims of ancient date and venerable aspect are again in the fore, in this state, for payment. It would take about a million dollars to liquidate these alleged claims against the sovereign state of Illinois. The claimants admit that they have no case in law, but rely upon the generosity of the state. That's right. They will never have anything more substantial to rely upon.

SPEAKING of good firms and good machinery, another firm that may be mentioned is the Richmond City Mill Works, of Richmond, Ind. They have made a name for the machinery of their manufacture, among which are their Portable Mills for all sorts of work, such as grinding corn, feed, etc., which is so often a profitable adjunct to the elevator man's business. We bespeak for any of our readers who want anything in their line prompt and courteous attention.

GOV. OGLESBY sent the following names to the Illinois Senate for membership of the Board of Railway and Warehouse Commissioners, on April 2, who were confirmed by an almost unanimous vote: Wm. T. Johnson, Cook county; Benjamin F. Marsh, Hancock Co., and John I. Rinaker, of Macoupin. This is considered to be a strong board, composed of men who did not seek the office. Mr. Johnson is a hardware merchant of this city, and while a member of the state legis-

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MOST of any money the traveling ment of ac... in consequence. The Kankakee Line is not in that category of railroads. A representative of this paper had occasion to go on this line over business and found the same excellent accommodations and courtesy of officials that have always characterized it and made it so universally popular.

PATRICK EGAN, Esq., President of the Irish National League of America, and formerly Secretary of the Irish Land League, is, as our readers are probably aware, in the grain business at Lincoln, Neb., with elevators at different points in that state. Mr. Egan writes us under date of April 2 as follows: "I have perused with much interest the copies of the AMERICAN ELEVATOR AND GRAIN TRADE which you were good enough to send me; and it affords me pleasure to inclose you one dollar, my first year's subscription. Your paper contains quite a mass of well-selected and very valuable information, which every elevator man throughout the country would do well to read." We appreciate so neat a compliment from so eminent a source.

At the Waterways Convention, recently held at New Orleans, Messrs. J. C. Dore, of Chicago, and J. H. Murphy, of Davenport, Iowa, made a strong and favorable impression on the Southern men in behalf of the Hennepin Canal as an integral part of the common river and lake system connecting the Gulf and the Atlantic with the great Western Valley to their mutual advantage. Mr. Dore, chairman of the convention, electrified his audience with the clearness and force of his views. He said that this was a measure of national importance, insuring cheap transportation from the Mississippi to the Atlantic, especially for the advantage of the whole upper valley; and the same arguments were applicable to it as to the jetties at the Gulf. He did not believe that the citizens of New Orleans were jealous of the prosperity of this vast region, and would reciprocate the use of national funds for their benefit, which had been spent by millions in now aiding that of the upper valley, meeting the demand of the hour in a spirit of broad-minded statesmanship. The speech of Mr. Murphy, for years identified with this enterprise, was equally strong and convincing.

A SUIT for libel was recently brought in the U. S. Circuit Court for the District of Minnesota by Locke vs. the Bradstreet Commercial Agency, for sending a statement to its membership to the following effect: The elevator company which is the real complainant, is considered unsafe by the Chamber of Commerce, and Locke has misled the investors by putting up a building that is unsafe, etc. The charge of Judge Nelson to the jury said: "It is my duty to instruct you that every willful and unauthorized publication, written or printed, which imputes to a merchant or other business man conduct which is injurious to his character or standing as a business man or merchant is a libel, and implies malice; but whenever the author or publisher acting in the bona fide discharge of a public or private duty, legal or moral, or in the prosecution of his own rights or interests, that which is communicated in writing under such circumstances is a privileged communication, unless it is actuated by malice; if it is a privileged communication, then, although the statements are defama-

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* 5-6c per. bushel are to
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THE must be proved to entitle it to recover damages. A privileged within the rule when the information sought, and it will be judged when volunteered if the party by whom it is made stands in such relation to him as to make it a reasonable duty, or at least proper, that he should give the information."

In the application of these rules to the present case the questions to be considered, said the judge, were as to whether the relations of the defendants to their subscribers, made the communication of such information a reasonable duty, and whether in reply to inquiries there was a just occasion for communicating the facts. The falsehood of the statement and the absence of probable cause would determine whether privilege was abused, and the communication was defamatory and actuated by malice; the rule also requires that ordinary care and caution be exercised in obtaining the information. The jury gave a verdict for defendants.

A bill is pending before the Illinois Legislature, and is likely to pass, extending the state regulation of wheat inspection, which is now limited to the Chicago elevators, thus made public. Last year the elevator capacity of the latter, some 27,000,000 bushels, was supplemented by 6,000,000 handled by outside houses. South Chicago is becoming an important center of this trade, and is steadily diverting an increasing amount of grain from the city houses. The elevator men are now willing to have the elevators of that village and East St. Louis placed in this category. These are the only two points that will be affected by a general law to which the constitution limits legislation, allowing this classification to points having an elevator capacity of 3,000,000 bushels. Notwithstanding the statement to the contrary made in the recent discussion of this matter in the Minnesota Legislature, the Illinois law has never contemplated making the small country elevators public. If this bill passes, the saving, it is said, on each vessel in loading at South Chicago in lieu of crawling through the crowded river, will be \$130, and the result will be to transfer this business mainly to the mouth of the Calumet River or some twelve miles below its present habitat.

THE HOME MARKET FOR AGRICULTURAL PRODUCTS.

The Million, an Iowa advocate of anti-protection in our revenue policy, presents in its issue of April 11 a statement, with illustrative diagram, in which spaces show the proportions to the eye of consumption to the total value of the agricultural products of this country obtained from the census reports of 1880 and other official statistics, and their consumption by the six representative classes composing our population. According to these authorities the aggregate value of our agricultural products in the year named was \$3,600,000,000. Of this, those engaged in professional and personal services, and foreigners—that is, our exported breadstuffs—consume each 19 per cent. The farmers consume 35½ per cent.; the manufacturers—the protected class—3¾ per cent.; the unprotected working manufacturers, 9¼ per cent., and those engaged in trade and transportation 8¼ per cent.

From the numerous conclusions drawn by the writer from these facts, we take the following: Farmers excepted, more of our products are consumed in our exports than by any one class except the farmers; thus the "foreign paupers" are twice as good customers of the farmers as all the manufacturers that can possibly be protected. The total market furnished by these foreigners is for \$315,000,000 in value; less than one-fourth of that which is used by the farmers themselves, or 8¼ per cent. of our total crop, and less than one-seventh of the amount of manufactured goods bought by the farmers; it is less than one-seventh—13½ per cent.—of what the producers sell to other classes. If half the other producers are

protected, then half the purchases of the farmers pay for protection. In short, the farmers buy \$1,161,000 worth of protected goods, and the manufacturers buy \$315,000,000 worth of the farmers. A 27 per cent. tariff would cost the farmers the full amount of their sales to that class; our present 40 per cent. duty costs them nearly half as much grain as their gross receipts from the manufacturers. Says this stalwart sheet: "The farmers pay \$1.50 for the privilege of selling as much of their truck as will bring \$1 in order to spite a customer who buys \$2.17 worth, but would like to invest some \$3 or \$4. The protected class comprise 11 per cent. of our population, the others 89 per cent."

BUILD WELL.

Scores of elevators are going up this season; we might say hundreds. Following the history of the past, some of these will be well planned, convenient and cheap to operate, and well built. Others may have some, but not all of these desirable attributes, and some will have none of them. The owners of these last need praying for. Advice is cheap to the giver and we will therefore tender some of it.

Don't make a god of cheapness to begin with. First cost, of course, is a very considerable item; the item, of course; but it is easy to overcome a saving of a couple of hundred dollars, with repairs, extra power, annoyance and charges—particularly the latter.

Don't plan everything yourself unless you have a better idea of an elevator than nine out of ten of the men who own and operate them. Plan the general features; it is best you should; but leave the details to some one skilled in that business.

Don't have some barn-builder construct your house. It may prove convenient and substantial, but ten to one it will be the reverse. Get some one who knows something of the requirements of a building for such a purpose. It is not pleasant to have your elevator and its contents part company through the side of the building on a wet night.

Build well.

THE WHEAT TRADE OF MINNEAPOLIS.

The annual report of the Chamber of Commerce of Minneapolis for 1884, in reference to the grain trade of that city, makes the following statements: Wheat is the leading article of trade, and as Minneapolis is the largest primary wheat market in this country she has also become the chief milling city; her receipts of wheat during the last three years have exceeded that of any other market, New York excepted, by several million bushels. Four-fifths of all the wheat received is made into flour there; the shipments of the grain are mainly in off grades, purchased for cleaning and mixing, which, says the report, finds its way to Milwaukee and Chicago. There is, however, a considerable order trade in wheat for the millers of Wisconsin, Southern Minnesota, and Iowa, that is increasing.

The sales, according to the views of the average granger, are made by samples, as public inspection and weighing at the great markets are suspected; the wheat is consigned to commission firms as a rule. The organization of the Chamber has greatly facilitated operations, and the former delays, when few firms were so engaged, and other inconveniences have disappeared; and at all times parties are ready to take the wheat; the promise is that the steadily increasing business of the Chamber will soon include, practically, all the good milling wheat.

The lack of elevator capacity has been a great drawback; but 2,000,000 bushels have been added recently, making a total of 5,000,000 bushels; as this space was so filled that a large amount of grain remained in the country houses, and with the farmers, this capacity will this season be increased to 10,000,000 bushels. The movement of the present crop has been, for the first four months of the crop year, unusually large. Out

of a crop estimated at 50,000,000, there has been delivered 42,000,000 by farmers in Minnesota and Dakota; on Jan. 1 there were in sight 7,000,000 in country houses, and 10,000,000 bushels in Duluth and St. Paul elevators, showing that one-half of the crop had been made into flour, or shipped in these four months. The average price paid was the lowest since Minnesota became a wheat-growing state. The receipts of corn, barley, and oats were light.

CHICAGO TRADE IN BREADSTUFFS.

The twenty-seventh annual report of the trade and commerce of this city has just been prepared and published by Secretary Geo. F. Stone, of the Chicago Board of Trade; to the statistics and data of the trade of this city are added those which concern the country at large and foreign states so far as needed to elucidate the local statements. The following table shows the receipts and shipments of breadstuffs at this port in 1884, with the receipts of 1883:

| | Receipts. 1884. | Shipm'ts. 1884. | Receipts. 1883. |
|----------------------------|--------------------|--------------------|--------------------|
| Flour, brls..... | 4,960,830 | 4,808,884 | 4,295,515 |
| Wheat, bu..... | 26,397,587 | 21,046,577 | 20,364,155 |
| Corn, bu..... | 59,580,445 | 53,274,050 | 74,412,319 |
| Oats, bu..... | 40,082,362 | 34,230,293 | 36,502,283 |
| Rye, bu..... | 3,327,516 | 4,365,757 | 5,484,259 |
| Barley, bu..... | 7,849,829 | 4,095,500 | 5,695,358 |
| Total breadstuffs, bu..... | 159,561,474 | 138,652,155 | 164,924,732 |

The receipts of grain thirty years ago, in 1855 aggregated 19,284,723 bushels, against an aggregate last year of 137,237,739 bushels; in 1843 one or two-horse power elevators furnished all the storage required which in primitive style received in one ungraded mass the grain of our market. Now twenty-seven great elevators, supplied with the latest improved appliances, register over 26,000,000 bushels capacity, and carefully inspect the grain under a management that is a guarantee of accuracy. The largest amount of grain ever stored in these houses was, on March 15, 22,833,381 bushels. This is the first report of the new secretary, and contains a clear statement as to the history and conditions of our commerce, our agricultural productions, national finances, business morality, our relations to foreign governments, especially in regard to their tariff policy, etc., all carefully selected, and of great value to students of commerce and trade.

WITH a perversity steeped in malice; with a watchfulness that never sleeps and never tires; with an ingenuity worthy a United States patent, the intelligent compositor with diabolical delight twists the worthy editor's "copy" so as to make him say something he did not wish to say. Most errors that are credited to the compositor are really the oversights of the editor; but generally, say three or four times in a stickful, the faithful comp. manages to put a republican sentiment in a democratic mouth, an infidel's utterance in the lips of a worthy divine, or something as appalling. He never transforms words into unmeaning gibberish; that would do no special harm; he simply edits the "copy" to suit his own notions. For instance, last month in describing Demuth's Check Scale Beam, we spoke of the "unproved" copy of the weighman. Of course the compositor made it "improved." He did not make it "impaired," or "unknown," or anything that would be senseless. Of course not. He just inverted the real sense. In referring to the same Check Scale Beam the month previous, the same inspired imp of mischief made the same mistake. Of course such errors always get through the proof room. Proof readers never let anything go through that makes good sense or the right sense. The compositor takes Peck's Bad Boy for a model and the proof reader, who ought to play the part of the young imp's father with a piece of cordwood, enacts that of his "chum" who aids and abets him.

It is scarcely probable that good farming will make more rapid progress in Australia and India than here, and upon better farming rather than the opening up of new fields for wheat production we must depend for the cheap wheat supply of the future.

GRAIN MOVEMENT AT THE FOUR PORTS.

From *Bradstreet's*.

THE COST OF ELEVATING AND LOADING GRAIN AT BOSTON, NEW YORK, PHILADELPHIA AND BALTIMORE.

The bill now before the New York state legislature which has in view the regulation (reduction) of elevator charges at cities in New York state having a population of not less than 100,000 in reality at New York City and at Buffalo, provides that:

SECTION 1. The maximum charge for trimming, elevating, receiving, weighing, discharging and storing grain in and by means of floating and stationary elevators and warehouses in this state shall not exceed the following rates, viz.: 1. For elevating, receiving and weighing grain one-half of one cent a bushel. 2. Vessels or canal boats shall only be required to pay the actual cost for trimming when loading, and for shoveling or trimming grain to the leg of the elevator when unloading.

This brings up the whole subject of terminal charges at New York, Baltimore, Philadelphia and Boston, together with features of the development of the grain trade at those ports during the past decade. The bill before the legislature is backed by the Erie canal boatmen, and has the indorsement of leading members of the New York Board of Trade and Transportation. At a late meeting of the New York Chamber of Commerce a resolution was adopted to the effect that "the charges (for elevating at New York) are excessive and the legislature should make such reduction as may appear just to all interests." At a subsequent meeting this resolution was reconsidered and referred to a special committee. The latter at present writing has made no report. At Albany the bill is being discussed in committee of the whole, which adjourned on Tuesday after expressing a desire for data respecting elevating and other terminal charges on grain at neighboring Atlantic ports. This comparative view of the situation had been anticipated by *Bradstreet's*, and analyses of the grain trade of New York, Baltimore, Philadelphia and Boston, with terminal charges at those cities, are herewith presented.

At the outset detailed reports of receipts and of exports of wheat, Indian corn and oats at the four cities for eight years, are furnished in the accompanying table.

The fluctuations in receipts and exports, as shown above, have been governed mainly by the size of the various crops, the growing consumptive demand, and to a considerable extent by the strength of the demand from Europe. It cannot be truthfully alleged that New York has "lost" any material portion of its grain trade. The visible "diversion" of the grain trade from New York has been going on since 1882. This the Produce Exchange attributes to differential charges (by the trunk-line railways) in favor of Philadelphia and of Baltimore. Boston does not appear to enter into this account. As summarized in *Bradstreet's*, Nov. 1, 1884, the argument of the New York Produce Exchange grain merchants on the point referred to is as follows:

Receipts by rail of grain in bushels at New York, Philadelphia and Baltimore during the years named have been as follows:

| | Philadel- phia. | Baltimore | N. Y. | Crops U. S. |
|-----------|--------------------|------------|------------|---------------|
| 1870..... | 10,250,000 | 8,250,000 | 15,000,000 | 1,617,000,000 |
| 1871..... | 15,250,000 | 14,750,000 | 19,000,000 | 1,520,000,000 |
| 1872..... | 19,250,000 | 14,750,000 | 21,750,000 | 1,656,000,000 |
| 1873..... | 20,000,000 | 12,500,000 | 29,750,000 | 1,540,000,000 |
| 1874..... | 17,500,000 | 17,000,000 | 39,500,000 | 1,440,000,000 |
| 1875..... | 18,250,000 | 15,000,000 | 36,000,000 | 2,021,000,000 |

In the years here given the differential rates were 5c. per 100 pounds in favor of both Baltimore and Philadelphia. In the succeeding year the record was:

| | Philadel- phia. | Baltimore | New York. | Crops U. S. |
|-----------|--------------------|------------|------------|---------------|
| 1876..... | 31,500,000 | 29,500,000 | 40,750,000 | 1,953,000,000 |

and the Philadelphia rate was 4c. per 100 pounds less than to New York, and the Baltimore rate 5c. less. From 1877 to date the differential rate has been 3c. less to Baltimore and 2c. less to Philadelphia:

| | Philadel- phia. | Baltimore | N. Y. | Crops U. S. |
|------------|--------------------|------------|------------|---------------|
| 1877..... | 21,750,000 | 29,500,000 | 34,000,000 | 2,168,000,000 |
| 1878..... | 40,500,000 | 41,000,000 | 63,750,000 | 2,287,000,000 |
| 1879..... | 43,750,000 | 59,750,000 | 76,750,000 | 2,696,000,000 |
| 1880..... | 45,000,000 | 54,750,000 | 72,000,000 | 2,703,000,000 |
| 1881..... | 21,500,000 | 37,750,000 | 73,250,000 | 2,053,000,000 |
| 1882..... | 14,750,000 | 22,750,000 | 53,750,000 | 2,088,000,000 |
| 1883..... | 17,500,000 | 30,750,000 | 51,250,000 | 2,621,000,000 |
| 1884*..... | 10,000,000 | 20,250,000 | 34,750,000 | 2,987,000,000 |

*Nine months. †Preliminary estimate.

The report concludes its examination of the figures given as follows:

An analysis of the table above given of comparative movement 1884 with 1883, when at the outset of a great crop movement "an arbitrary and unfair charge" was imposed upon the New York Roads, points to it as a cause why Philadelphia gained 2,750,000, Baltimore 8,000,000, while New York lost 2,500,000 in aggregate rail receipts.

The argument is concluded by calling for the removal of the tax of 1c. per bushel on all railroad grain loaded from elevators into ocean vessels, or for the modification or abolition of the differential freight rates.

As pointed out in the table given herewith, in which the values of all breadstuffs exported from the four ports for four years are shown, the decline in value of those shipped from New York is but 20 per cent. since 1880; from Baltimore it is 25 per cent., from Philadelphia 50 per cent., while from Boston the increase has been 100 per cent. There is, therefore, no apparent danger of New York losing the larger share of the grain trade, as foreshadowed by the records of late years. The few prominent grain concerns of New York which, some years ago, established branch offices at Baltimore, have discontinued them.

We now come to the allegations of the canal boatmen and their allies, which are to the effect that New York's elevators charge too much for the work performed by them, that they are taxing the canal boatmen too heavily, and promise thereby to destroy the usefulness of the

Erie Canal. A primary argument advanced is found in the following exhibit taken from a boatman's pamphlet issued during the struggle at Albany, designed to show the injustice of the New York elevating charges:

Exhibit showing the aggregate charge per 1,000 bushels for transferring grain in the ports of Chicago, Buffalo and New York in 1884:

| CHICAGO CHARGES. | |
|---|---------|
| Grain pays elevator..... | \$5.00 |
| Boat pays elevator trimming out..... | 2.00 |
| Vessel pays elevator trimming in..... | .75 |
| Total per 1,000 bushels..... | \$7.75 |
| BUFFALO CHARGES. | |
| Grain pays elevator..... | \$7.50 |
| Vessel pays elevator for elevating..... | 1.25 |
| Vessel pays elevator trimming out..... | 4.50 |
| Boat pays elevator trimming in..... | 1.25 |
| Total per 1,000 bushels..... | \$14.50 |
| NEW YORK CHARGES. | |
| Grain pays elevator..... | \$5.00 |
| Boat pays elevator trimming out..... | 1.50 |
| Boat pays elevator per extortion..... | 3.50 |
| Vessel pays elevator trimming in..... | 2.00 |
| Vessel pays elevator for no service whatever..... | 6.00 |
| Total per 1,000 bushels..... | \$18.00 |

It may be well to inquire into these charges. At Chi-

ever." These, amounting to about 5 1/2 c. per bushel are to cover interest on investment, depreciation in plant, wharfage and incidentals, and the maintaining the service of clerks and officials at the beck and call of boat and vessel owners to facilitate the dispatch of business. The grain-export trade of New York cannot be compared in its methods to that of the inland lake grain shipping trade. Loading alongside elevators is not possible with the larger steamers coming here. These carry miscellaneous cargoes and must often be loaded while taking on other freight. Promptness and dispatch are vital points in loading. Three days were formerly required to load a vessel with a boatload of grain which can now be handled in two or three hours. These facilities cannot be expected to be gratuitous. It is seen that while the boatmen have to pay 1 1/2 c. per bushel for trimming and "extortion" (i. e., for other expenses and for profits of the elevator) the vessel has to pay (average) about 7-10c. —whence there is no complaint. The railroad elevators charge 1-4c. per bushel for receiving, weighing and storage (ten days storage included) and charge the usual amounts for shoveling and trimming (as given above) with an additional charge of 1c. per bushel if delivered on board of ocean steamships. The charges include light-erage free to any part of the port of New York. The 1c. tax named is that which the Produce Exchange is striving to have removed, as outlined above. The Brooklyn

RECEIPTS OF WHEAT AT FOUR SEABOARD PORTS.

| Calendar Years. | 1877. | 1878. | 1879. | 1880. | 1881. | 1882. | 1883. | 1884. |
|--|------------|-------------|-------------|-------------|------------|------------|------------|------------|
| New York..... | 24,854,899 | 63,273,492 | 71,246,796 | 59,492,246 | 44,297,112 | 44,857,841 | 27,087,779 | 36,864,761 |
| Baltimore..... | 7,331,540 | 22,017,130 | 34,634,436 | 36,414,393 | 30,933,255 | 17,899,569 | 17,146,432 | 17,756,630 |
| Philadelphia..... | 4,011,400 | 11,976,351 | 29,074,100 | 15,123,330 | 8,399,032 | 6,750,332 | 5,257,087 | 5,442,450 |
| Boston..... | 2,061,579 | 3,953,280 | 5,840,593 | 3,920,317 | 3,531,917 | 3,304,535 | 1,893,214 | 1,919,137 |
| Totals..... | 38,259,418 | 101,230,242 | 131,795,915 | 114,950,286 | 77,155,316 | 72,811,737 | 51,385,142 | 62,012,978 |
| Total receipts seven Atlantic ports..... | 47,437,656 | 112,637,795 | 164,427,483 | 131,283,023 | 89,505,584 | 88,466,017 | 60,788,121 | |

EXPORTS OF WHEAT AT FOUR SEABOARD PORTS.

| | 1877. | 1878. | 1879. | 1880. | 1881. | 1882. | 1883. | 1884. |
|---------------------|------------|-------------|-------------|-------------|-------------|-------------|------------|------------|
| New York..... | 21,795,693 | 55,170,643 | 62,342,802 | 61,908,029 | 41,788,768 | 37,620,103 | 21,712,653 | 28,687,362 |
| Baltimore..... | 4,519,753 | 19,610,791 | 32,144,349 | 33,768,98 | 19,676,640 | 17,561,407 | 15,237,071 | 16,511,360 |
| Philadelphia..... | 2,548,301 | 8,785,100 | 17,348,001 | 12,217,039 | 9,008,869 | 5,838,632 | 4,416,872 | 5,200,125 |
| Boston..... | 1,548,837 | 3,885,609 | 4,895,366 | 2,927,244 | 3,139,439 | 2,244,952 | 694,884 | 1,692,081 |
| Totals..... | 30,412,584 | 87,455,143 | 116,730,578 | 110,821,297 | 73,613,716 | 63,268,084 | 42,060,980 | 52,090,908 |
| Total exported..... | 48,626,672 | 109,796,616 | 147,252,605 | 144,659,645 | 120,462,870 | 110,343,185 | 71,013,280 | 79,434,182 |

RECEIPTS INDIAN CORN AT FOUR SEABOARD PORTS.

| | 1877. | 1878. | 1879. | 1880. | 1881. | 1882. | 1883. | 1884. |
|--|------------|-------------|------------|-------------|-------------|------------|------------|------------|
| New York..... | 34,963,432 | 38,747,012 | 42,791,034 | 61,076,810 | 43,932,930 | 16,839,504 | 35,659,359 | 19,488,523 |
| Baltimore..... | 21,212,399 | 17,907,108 | 23,162,986 | 16,590,291 | 15,486,884 | 3,401,408 | 11,779,638 | 7,093,051 |
| Philadelphia..... | 13,886,300 | 23,885,900 | 18,397,000 | 24,930,750 | 16,098,440 | 3,842,890 | 7,650,967 | 3,522,300 |
| Boston..... | 7,362,718 | 10,083,280 | 11,143,961 | 16,161,419 | 14,723,232 | 6,846,304 | 12,061,097 | 9,078,308 |
| Totals..... | 77,424,849 | 90,123,300 | 95,395,001 | 118,779,270 | 92,239,526 | 30,910,246 | 67,151,031 | 39,182,182 |
| Total receipts seven Atlantic ports..... | 88,806,070 | 104,500,064 | 105,408,9 | 140,837,511 | 102,172,392 | 34,671,718 | 85,762,837 | |

EXPORTS INDIAN CORN AT FOUR SEABOARD PORTS.

| | 1877. | 1878. | 1879. | 1880. | 1881. | 1882. | 1883. | 1884. |
|-------------------------------|------------|------------|------------|-------------|------------|------------|------------|------------|
| New York..... | 26,759,636 | 27,870,992 | 36,451,175 | 49,875,480 | 31,614,480 | 9,012,373 | 25,445,262 | 11,862,158 |
| Baltimore..... | 19,051,327 | 16,953,458 | 31,327,419 | 14,686,402 | 12,735,083 | 1,271,823 | 10,011,941 | 4,993,759 |
| Philadelphia..... | 10,190,685 | 19,896,914 | 14,085,606 | 18,130,235 | 6,549,211 | 856,211 | 5,772,493 | 2,298,767 |
| Boston..... | 3,095,084 | 6,669,188 | 6,889,082 | 11,580,167 | 8,445,493 | 2,088,616 | 4,634,509 | 4,247,070 |
| Totals..... | 59,096,732 | 71,390,502 | 88,735,282 | 94,272,234 | 59,644,267 | 13,329,023 | 45,864,205 | 24,371,754 |
| Total exported from U. S..... | 72,639,176 | 85,411,400 | 87,408,899 | 115,279,399 | 72,825,904 | 15,423,593 | 61,270,663 | 32,552,037 |

RECEIPTS OATS AT FOUR SEABOARD PORTS.

| | 1877. | 1878. | 1879. | 1880. | 1881. | 1882. | 1883. | 1884. |
|---------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| New York..... | 12,401,096 | 14,831,286 | 11,403,283 | 13,997,960 | 14,684,857 | 16,040,989 | 19,041,085 | 18,167,287 |
| Baltimore..... | 831,182 | 1,052,046 | 1,616,927 | 1,172,487 | 935,616 | 1,041,743 | 1,191,462 | 1,660,902 |
| Philadelphia..... | 2,503,300 | 3,798,350 | 3,499,801 | 3,638,760 | 3,421,454 | 2,972,882 | 3,405,521 | 4,179,500 |
| Boston..... | 3,108,128 | 3,294,618 | 3,551,542 | 3,559,392 | 4,074,040 | 4,346,641 | 5,737,361 | 5,840,310 |
| Totals..... | 18,843,706 | 22,976,900 | 20,171,552 | 22,368,599 | 23,115,967 | 24,402,255 | 29,878,429 | 29,847,999 |
| Total seven seaboard ports..... | 20,635,308 | 25,196,120 | 21,995,917 | 25,040,714 | 26,441,570 | 26,919,673 | 32,028,491 | |

EXPORTS OATS FROM FOUR SEABOARD PORTS.

| | 1877. | 1878. | 1879. | 1880. | 1881. | 1882. | 1883. | 1884. |
|-------------------------------|-----------|-----------|-----------|---------|---------|---------|---------|-----------|
| New York..... | 258,299 | 3,473,383 | 485,235 | 427,959 | 434,337 | 170,586 | 147,834 | 2,456,219 |
| Baltimore..... | 8,840 | 19,263 | 76,597 | 19,825 | 10,035 | 7,537 | 4,088 | 900 |
| Philadelphia..... | 10,650 | 36,548 | 25,308 | 31,104 | 8,402 | 6,533 | 8,483 | 22,990 |
| Boston..... | 33,592 | 63,599 | 41,734 | 21,155 | 800 | 2,854 | 2,981 | 5,941 |
| Totals..... | 311,381 | 3,589,703 | 623,934 | 500,043 | 453,574 | 187,511 | 163,336 | 2,485,969 |
| Total exported from U. S..... | 1,048,571 | 6,389,450 | 1,139,554 | 898,390 | 603,999 | 523,731 | 485,946 | 3,153,871 |

TOTAL EXPORTS OF BREADSTUFFS, VALUE, YEARS ENDED JUNE 30.

| For | All ports. | Boston. | P. ct | New York. | P. ct | Phil'delphi | P. ct | Baltimore. | P. ct |
|-----------------|-----------------|--------------|-------|---------------|-------|--------------|-------|---------------|-------|
| 1880..... | \$388,036,835 | \$14,927,619 | 5.18 | \$184,671,446 | 46.75 | \$28,987,812 | 10.06 | \$56,364,054 | 19.57 |
| 1881..... | 270,332,519 | 17,820,287 | 6.59 | 122,852,883 | 45.44 | 23,240,258 | 8.59 | 49,260,325 | 18.22 |
| 1882..... | 182,670,528 | 11,895,689 | 6.51 | 77,908,258 | 42.65 | 9,467,659 | 5.18 | 21,946,113 | 12.01 |
| 1883..... | 208,040,850 | 15,630,060 | 7.51 | 84,969,528 | 40.84 | 13,245,762 | 6.36 | 32,229,846 | 15.49 |
| 1884..... | 162,544,715 | 17,895,103 | 11.01 | 60,619,422 | 37.42 | 6,845,435 | 5.12 | 23,366,857 | 14.37 |
| Five years..... | \$1,111,625,447 | \$78,168,758 | 7.08 | \$481,221,537 | 43.29 | \$33,286,926 | 7.41 | \$183,167,385 | 16.47 |

cago the grain pays 1/2 c. per bushel for elevating, the lighter pays 1.5c. for trimming out, and the vessel pays three-fortieths of a cent for trimming in, in all a charge of about 1/2 c. per bushel, or \$7.75 per 1,000 bushels, or \$62 per 8,000 bushels, a canal boat load. This is for transferring only and does not include (1/2 c. 10 days) storage. At Buffalo the grain pays the elevator 1/2 c. per bushel for elevating, and the vessel 1/2 c. additional, inclusive of 10 days, or 1/2 c. and 1/2 c. exclusive of storage, 1/2 c. in all; besides which the vessel pays for trimming out 45-100c. per bushel (more than twice as much as at Chicago). The canalboat pays 1/2 c. per bushel for trimming in. At New York the grain pays the floating elevator 1/2 c. per bushel, the canalboat pays 1/2 c. per bushel, and the vessel on an average, 7-10c. not 8-10c. per bushel as shown above—due to use of both bagged and bulk wheat. The total charges for complete transfer at the three cities, with storage, are: At Chicago: 1 1/4 c. per bushel; at Buffalo, 1 1/2-100c., and at New York 1 7/10 c. Two items are complained of by the canal boatmen (in the New York floating elevator charges) as "extortion" and "for no service what

stores and warehouses charge 1.2c. per bushel for receiving and storing (10 days). Elevating from canal boats is 1-2c. per bushel with the usual charges for trimming out and in. Here we find three sets of elevators in the harbor of New York. The railroad elevators are four in number, the Pennsylvania and the Erie elevators in New Jersey, with capacity of 1,250,000 bushels each, and the two New York Central elevators in New York City with a total capacity of 2,000,000 bushels. There are seventeen Brooklyn grain stores and warehouses with a total capacity of 14,110,000 bushels, thus giving a total grain storage capacity for the harbor amounting to 18,610,000 bushels. There are thirty floating elevators belonging to two firms and one company, one of the former owning twenty-one. The latter could handle probably 600,000 bushels daily if called on, or over five times what they have been required to do on the average of late years, yet are necessary to do the work at hand. The differential (arbitrary) tax of 1c. per bushel imposed by the railway elevators has driven off the export trade from them to some extent. The figures given above apply as outlined to the remaining elevators. The total canal boat

tax at Chicago is 1-5c. at Buffalo 1-8c, and New York 1-2c., per bushel.

The floating elevators have competition among themselves (three sets of them), and compete for a portion of the trade going to the Brooklyn stores. Despite the 9 and 7 per cent. dividends on elevator stock talked of, elevator stock (floating elevators) can be bought for less than par. The main question becomes then a consideration of the extent of net earnings of elevators over a series of years. The business is not a monopoly. The opportunity is open to any who wish to engage in the grain transfer business. A canalmen's floating elevator would soon solve the mystery. The former elevator monopoly at Chicago through which the grain had to pass, and which was cited in the Supreme Court decision which made them amenable to the laws affecting common carriers, is not paralleled by the floating elevators and stores at this port. The field here is open to others than those now engaged.

Philadelphia is provided with a storage capacity for grain for export equal to about 3,500,000 bushels, and two elevators in the city for the accommodation of grain for local consumption, with an aggregate capacity of 600,000 bushels. In addition to these there are numerous private warehouses. The Pennsylvania Railroad river-front terminals are located at Washington street wharf and Girard Point, where the Girard Point Storage Company have three elevators, one of 350,000 bushels capacity at Washington street, and one of 1,250,000 bushels, and another of 800,000 bushels capacity at Girard Point. The Reading's Delaware terminal is at Port Richmond, where the Philadelphia Grain Elevator Company have an elevator capable of handling 1,000,000 bushels. Besides there is a large capacity of 60,000 bushels and three floating elevators, with an hourly loading capacity of 2,000, 3,000 and 4,000 bushels respectively, or in all 9,000 bushels per hour. When the latter are used for lightening from elevators to regular line steamers at the latter's docks no charge is made in addition to the regular charge mentioned as the cost of receiving and storing for ten days and loading into vessels from elevators. The principal other service required of the floating elevators is to transfer grain which arrives in barges from the latter to foreign-bound tonnage in the harbor, and for this service the charge is $\frac{3}{4}$ c. per bushel for moving the grain, and $\frac{1}{2}$ c. per bushel for weighing it. There is no charge for blowing and screening. The charge for storing for each period of ten days in any of the elevators is $\frac{1}{4}$ c. per bushel. The details as to Baltimore's terminal facilities are given in the report appended.

A much stronger argument for lower elevating charges than any we have heard of at Albany is found in the comparison of charges here and at our neighboring ports. At Baltimore the total charge is 1 $\frac{1}{4}$ c. and at Philadelphia 1 $\frac{1}{4}$ c., which includes all items, or $\frac{3}{4}$ c. per bushel less each per bushel than at New York. At Boston the charge is the same as at Baltimore and Philadelphia, except the trimming charge of 1-5c. per bushel at Boston, paid by the ocean vessel, additional to the 1 $\frac{1}{4}$ c. mentioned. This is included in the through bill of lading and paid over to the railroad, in addition to inland freight on collection of through rate abroad. It is a charge on the grain, not on the ships. Yet it must be recalled that the Pennsylvania Railroad controls the elevating and steamship (foreign) grain trade of the port of Philadelphia (see Philadelphia report appended), and may well afford to do business with vessels generally coming alongside elevators for grain at the rates named. At Baltimore the grain trade is in the hands principally of the Baltimore & Ohio Railroad, although the Pennsylvania Railway has obtained a footing there. We will add that the New York firms referred to above—who went to Baltimore to do business a few years ago and have since removed thence—found it impossible to do a strictly commission business there outside of the railroad clique. In short, they are known to have left because of the monopolistic rebating tendencies of the railroads controlling the facilities of that port. At those cities we find, therefore, another influence in favor of keeping rates low at the expense of the roads owning and controlling the facilities in order to hold the trade possessed.

The abolition of wharf charges at Philadelphia (on grain-loading vessels) amounts to from \$5 to \$10 per day, or \$60, according to her register and length of time loading. The rate was 1c. per registered ton per day for steamers and from \$3 to \$6 per day for sailing vessels, according to tonnage register. Outward pilotage charges under the Pennsylvania law are \$3 for each foot of a vessel's draught. The cost for pilotage to vessels entering the port varies according to the point at which the vessel is spoken by a pilot. The lowest rate for outward service is \$3.36 $\frac{1}{2}$ per foot draught and the highest \$4.11 $\frac{1}{2}$ per foot draught. Dock charges at New York are 2c. per ton per day for first 200 tons and $\frac{1}{2}$ c. per ton for each additional ton each day, which often amounts to \$10 a day on ships. This tax begins when made fast to wharf and ends when ships set sail. Pilotage (inward bound) at New York, except those exempt by law, varies from \$2.78 to \$4.88 per foot, according to draught, and outward bound from \$2.02 to \$3.56, according to draught. At Boston there is no charge for lightening or wharfage ordinarily. When lightened the charge is $\frac{3}{4}$ c. and $\frac{1}{2}$ c. extra for wharfage. There is no wharfage or other charge whatever to the ship. Pilotage fees are, ten feet, \$1.70 per foot; fifteen feet, \$2.10; twenty feet, \$3.25, and twenty-five feet, \$5 per foot.

There is one point to be considered in the discussion over the elevator-charges bill at Albany which we do not recall seeing in print. Out of about 40,000,000 bush-

els of grain coming to New York by rail annually, 25,000,000 are received in Jersey City elevators. With this the proposed law could be evaded. The question of inter-state commerce arises at once, and so complex the subject as to prevent New York's state legislature from solving the problem, even if they desired to.

ITEMS FROM ABROAD

The tendency of the Belgian grain markets is now very dull.

The official statement of the wheat crop of New South Wales reports a surplus for export of 4,200,000 bushels, which is of very superior quality.

The grain shipping question in Russia has been completely changed by the development of railroads in that country. Odessa, which, twenty years ago, supplied 35 per cent. of the yearly exports, now supplies only about 17 per cent. The Baltic ports have gained the difference.

Austro-Hungary is complaining of the restrictions placed upon the export of rye, as they are so arduous and troublesome as to amount almost to an extinction of the trade. Deputations have been sent from the Vienna flour and grain exchange to the Minister of Foreign Affairs, to demand a remedy.

Like that of Messrs. Spartaill & Co., the failure of Messrs. Saramangi & Co., just announced, one of the oldest of Greek firms in the Russian trade, was mainly due to the depressed state of the grain trade. It is reported that during the past eighteen months the firm lost something like £200,000 from that cause—*Bell's Weekly Messenger, London, Eng.*

In South Australia the *Register's* estimate of the wheat crop has been published as follows: "Area cultivated and reaped 1,910,000 acres, showing an increase of 64,000 acres; average yield, 9 bushels per acre; total production, 17,190,000 bushels, leaving, after the necessary deductions for food and seed, 13,300,000 bushels, or 350,000 tons, for export, that being 37,000 tons in excess of the quantity exported last year. Five rains have fallen, and the work of plowing is being proceeded with.

Bell's Weekly Messenger, London, Eng., April 6, says: The imports of wheat and flour since the commencement of the season have been about 4,300,000 cwt. less than in the corresponding period of 1883-4, whilst the sales of home-grown produce have been about 60,000 qrs. more. Presuming that consumption must have been on an average scale, it follows that stocks must have been rather freely drawn upon. The market does not, however, respond to the whip, being still in a very apathetic condition. The average price of home-grown produce for the season is only 32s 5d per qr. against 39s 3d—a difference against this season of 6s 10d per qr.

Sir James Caird, the eminent English statistician, recently wrote to the *Times, London, Eng.*, some of the results of his observations on the future of grain and other commodities in the world's markets. He states that the American wheat harvest of 1884 aggregated an area of 39,475,000 acres, which was 3,000,000 greater than the previous year, or more than the whole English wheat acreage, and averaged 13 bushels per acre, obtaining an average value of only some \$8.12 per acre, the smallest price ever reported. This was a natural result of the high prices due to several bad crops, which had stimulated the production of the world. The present wheat area is reduced in the winter wheat states, the author says, some 8 per cent. In Dakota the farmers are nearly bankrupt and in debt for implements, having been obliged to sell their wheat at some 50 cents per bushel. The transportation rates have, he thinks, reached a point below cost; this does not promise a continuance of so large a wheat culture. The diminished receipts after the low prices of 1883, from America, India and Russia, show that the present low prices are exceptional. The writer, over thirty years ago, was the first to point out the fact that the price of meat and dairy products would hold out better than grain, which view has been fully sustained by facts. The more expensive articles hold their values because of the relative larger cost of the transportation of the coarser ones like grain. So, while Mr. Caird does not advise an abandonment of diversified agriculture, or of producing grain which aggregates more than the British consumption, he thinks that the true increase of exports should be of such products as cheese, butter, meat, etc., with improved methods of carriage. Incidentally the writer refers to the effect of the reduction of the grain duties by Sir Robert Peel in 1849, which was an increase of revenue from this source, while the one shilling duty was retained, and he says undoubtedly a large increase would follow its reintroduction; but he does not consider a policy that increases the price of bread to the workers and the masses generally, advisable.

At the present time, the believers in permanently low prices of wheat talk largely about the great resources of India and Australia. Wheat is an excellent commodity to have, and, unless better farming prevails, our home wheat demand is quite likely to increase as rapidly as our supply.

THE CHICAGO ELEVATORS AND THEIR TAXES.

There are twenty-seven grain elevators in Chicago. They belong to what the statutes call class "A," being located in a city of not less than 100,000 inhabitants, a device of the law to avoid special legislation. Under the statute the rates of charges for the year must be announced at the beginning of it. The maximum charge for the first ten days or part thereof is 1 $\frac{1}{4}$ cent per bushel, and for each ten days, or part thereof after ten days, one-half of 1 per cent. per bushel, with provisos allowing higher rates in certain exceptional cases. The right of the General Assembly to regulate these charges is not open to dispute. The maximum in law, as stated above, is the minimum in fact, except that the total for winter storage (Nov. 15 to April 15) is only 4 cents per bushel. Now the total capacity of these warehouses is 27,000,000 bushels, and if they are not always full they are generally very nearly so. According to the assessment rolls, even after the State Board of Equalization has gone over them, the aggregate value of these elevators is only \$980,261. The buildings alone must have cost fully ten times that amount, and the land itself on which they stand is enormously valuable. It is true that the surrounding property may be low-priced, but the site of a grain elevator is in itself a gold mine. This land belongs to railroad companies as a general thing, and as such comes under the head of "railroad track," and some of the elevators are classed for the purposes of taxation as the same, but assuming the above assessed valuation to apply only to the buildings, it is outrageously low. It should be multiplied by three at least.

In discussing railway taxation a few days ago it was conceded that there is a manifest propriety in exempting tracks and rolling-stock from local taxation and making the assessment upon them payable into the state treasury, but there is no reason why a grain elevator, no matter who owns it, should not be subject to local taxation, precisely the same as any other storehouse. At the present time the city of Chicago derives only about \$50,000 a year from the taxation on grain warehouses, which is hardly more than the earnings of one day. It requires no argument to prove that this is unjust and a serious hardship upon other taxpayers.

If this were all the change necessary in our warehouse legislation we should have no hope of securing it, for it is a local interest, and the average state legislator cares very little about what Chicago wants or needs. But every granger is interested in charges for grain storage, and the present maximum is altogether too high. It is said that one of our elevators paid its entire cost the first year, and there is nothing unreasonable in the statement. A little figuring upon the data furnished above will satisfy any reasonable person that such might easily be the case.

The grain-producing interest of the Northwest is entitled to storage rates that shall put elevator property upon substantially the same footing of profit as other good investments. There ought to be a thorough investigation either by the regular or a special committee of the elevator business of Chicago with a view to a revision of the legal maximum. Fourteen years constitute a long period, and during that time very great changes have occurred. The investigation should extend to the entire period since the law was enacted, or if the great fire prevents that, then let it cover the period since the fire. With those facts before the General Assembly and the public the duty of making a very material reduction would be perfectly plain and absolutely imperative.—*Inter-Ocean.*

WANTED.

A situation by a man thoroughly acquainted with the grain business and fully competent to run an elevator and engine. Has had ten years' experience. Can speak German and English. References furnished. Address JOHN M. BANDLE, Box 105, Marion, Ohio.

Special Notices.

The Chicago Scale Co. sell Scales of all kinds, also Portable Forges and Blacksmiths' Tools of all descriptions at about one-half usual prices. Buyers will save money by sending for their price list.

The Cambridge Roofing Co., of Cambridge, Ohio, have their iron roofing and siding on exhibit at the World's Industrial and Cotton Centennial Exposition, New Orleans, La. The roofing and siding are on a building occupied by S. C. Forsyth Machine Co., and marked with their name. The exhibit is in charge of George Crowl and E. F. Gage. Office in building, where prices and terms to agents and consumers can be obtained. Stock kept there for sale.

ELEVATOR WANTED.

An experienced grain and live stock man is desirous of renting an elevator where a liberal amount of business may be done on a fair basis. Please address
C, care of AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

WANTED TO RENT.

An elevator or grain warehouse at some point where a nice business could be worked up. Illinois or Iowa preferred. Would buy property if the business would warrant it. Address, with particulars,
A. D., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

WANTED, A SITUATION.

By a young man thoroughly acquainted with the grain and seed business, and fully competent to take charge of a large business. Or would take an interest in an elevator; Kansas or Nebraska preferred. Address
JOE H. TWIBELL, Montpelier, Ind.

For Sale.**FOR SALE.**

Fire, burglar-proof safes; vault doors and shutters; time locks. Second-hand safes cheap. We buy, sell or exchange. Address
MARTIN & Co., General Agents, Davenport, Iowa.

A BARGAIN.

One new Hutchison Dustless Corn Sheller, capacity, from 75 to 100 bushels per hour. Regular price, \$125. Will deliver on board cars for \$90. Address
ALPHA, care AMERICAN ELEVATOR AND GRAIN TRADE Chicago, Ill.

FOR SALE CHEAP.

Two Johnson Grain Cleaners, capacity 150 bushels per hour. Steel jackets with conical brush. Machines are new, having never been used, and will be sold at a bargain to close out lot. Address
SAVAGE & LOVE, Rockford, Ill.

ELEVATOR FOR SALE.

A very desirable elevator property, thoroughly equipped with machinery, sheller, dumps, scales, etc. in Western Iowa, where the country is full of grain, just ready for market. Full particulars given on application. Address
A. M., care AMERICAN ELEVATOR AND GRAIN TRADE Chicago, Ill.

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An elevator, situated on the Chicago & Rock Island Railroad, at Van Meter, Iowa, twenty miles west of Des Moines, Iowa. Capacity, 25,000 bushels. Twenty-five-horse power engine. New corn sheller, and a 3½-foot French burr for making bolted meal and feed. Elevator in good repair. Address
LAMOINE MOTT, Des Moines, Iowa.

ELEVATOR FOR SALE.

A very desirable elevator property, with a thirty-horse power engine. A corn sheller, feed burr, grain cleaner, dumps; everything in first-class order. Also stock yard with scales, all complete, if desired. Elevator capacity 25,000 bushels. Located 100 miles west of Chicago on the Chicago & Iowa Railroad. For full particulars address
DAVID PLUM, Maryland, Ogle Co., Ill.

FOR SALE IN NORTHWESTERN IOWA.

A new steam elevator of 10,000 bushels' capacity Well fixed; with fanning mill, flax cleaner, and two sets of elevators. New engine and boiler. Office and warehouse. Lots of flax can be loaned in the spring. Will also sell a new house of four rooms on opposite side of the street. A country with a radius of ten miles all around contributory. All for \$2,000. Address
STEAM ELEVATOR, care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

FOR SALE.

An 18,000-bushel steam power elevator with dumps, corn sheller, wheat and corn cleaners, and all the modern improvements. Also cribbing for 40,000 bushels of ear corn. Situated in a growing town in the center of the corn belt of Iowa. Very liberal terms; only a small cash payment required; balance annual payments without interest. This is a splendid chance to make money as the house will pay for itself before payments are due. Address
WM. H. NEGLEY, Kirkman, Shelby Co., Iowa.

A SURE FORTUNE.

Lease and machinery of warehouse for mixing and cleaning grain, for sale. In center of Chicago; water and rail facilities (for free switching); storage capacity, 75,000 bushels; a 40-horse power engine, and all necessary machinery to handle fifteen cars per day; \$25 to \$30 for each car cleaned, and all the business the house can do; cheap rent and long lease if desired. Terms half cash, balance negotiable paper. Price, \$6,500, and no less, which is simply the cost of machinery; no bonus asked; owner retiring. Address
AGNEW & Co., Financial and Land Agents, 154 La Salle street, Chicago, Ill.

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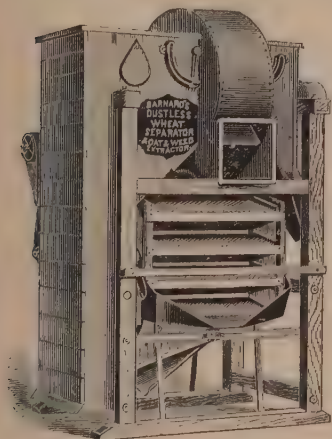
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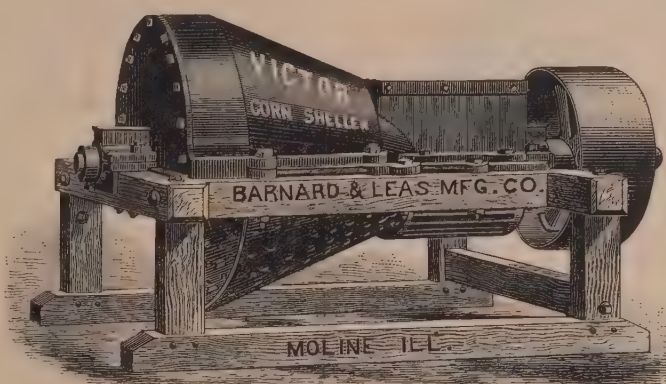
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Yours truly,

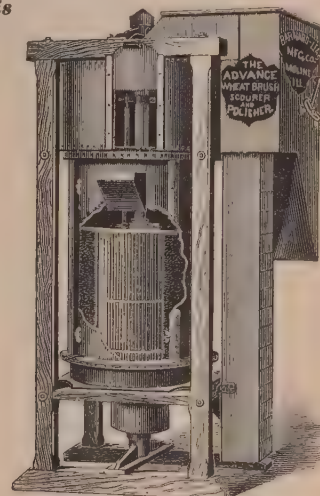
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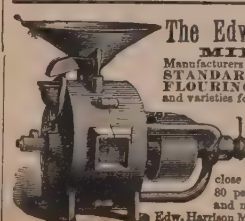
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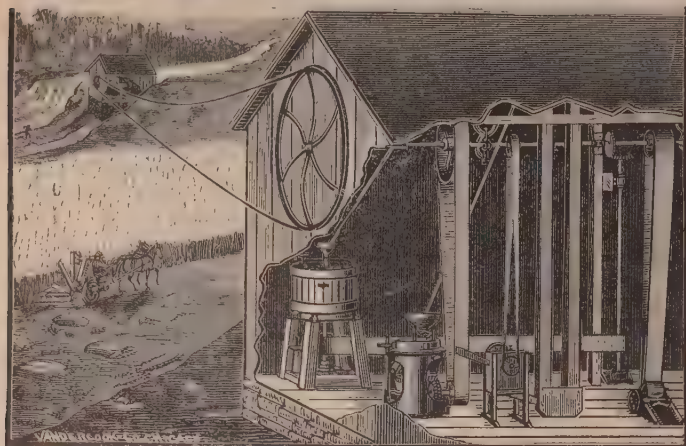
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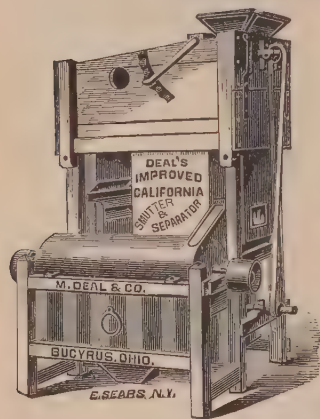
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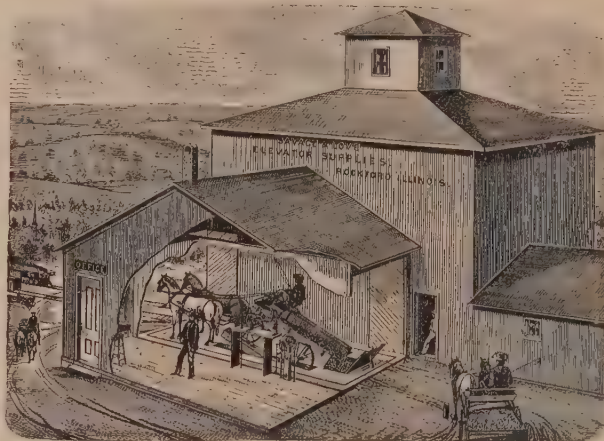
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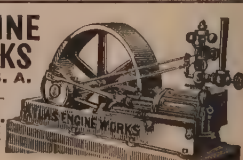
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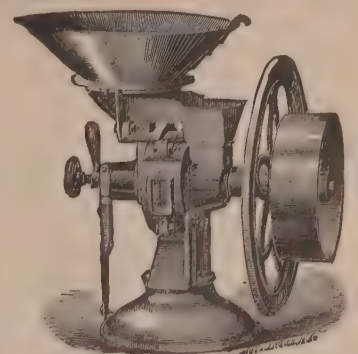
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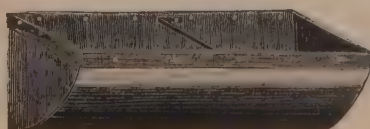
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| Arkansas Valley, Kansas City | 400,000 | Advance "B," East St. Louis | 750,000 |
| New York Central, New York | 900,000 | East St. Louis, East St. Louis | 1,000,000 |
| Baltimore & Ohio, Baltimore | 1,800,000 | Union, East St. Louis | 1,500,000 |
| Canton No. 1, Baltimore | 500,000 | Erie, Buffalo | 700,000 |
| Canton No. 3, Baltimore | 500,000 | Central "A," St. Louis | 800,000 |
| Michigan Central "B," Detroit | 600,000 | Lake Superior "B," Duluth | 1,000,000 |
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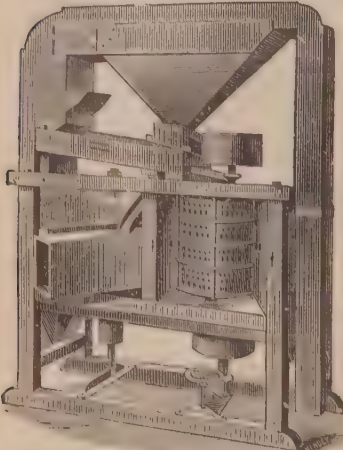
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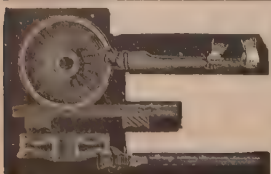
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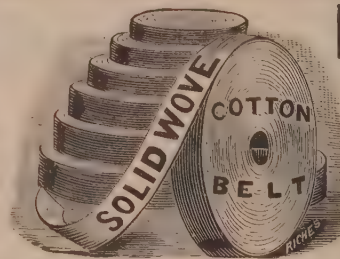


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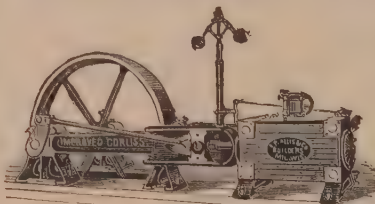
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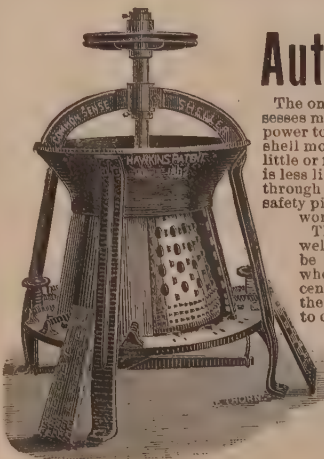
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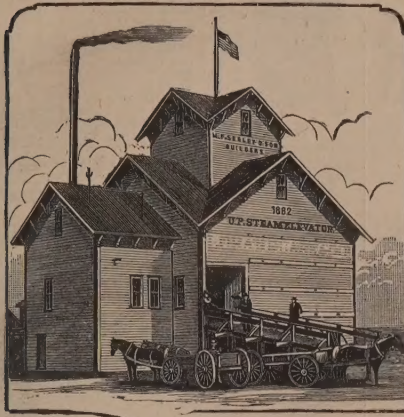
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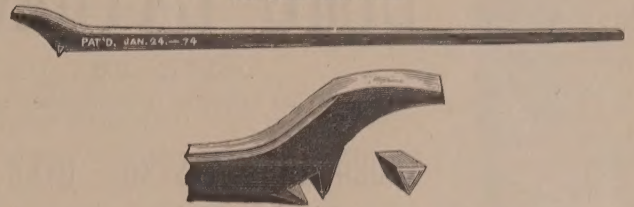
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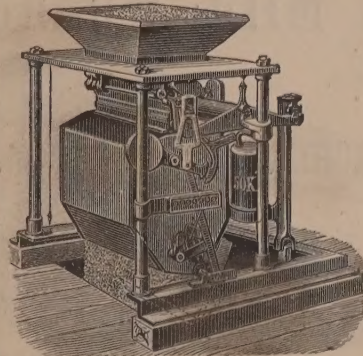
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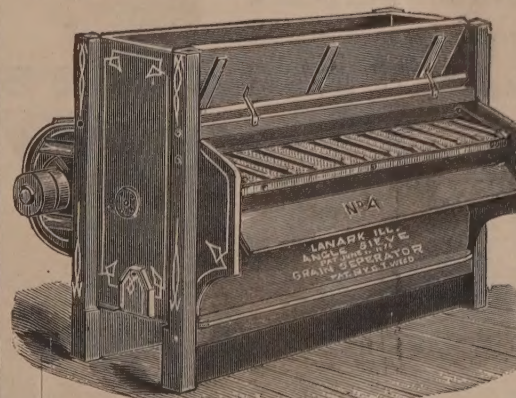
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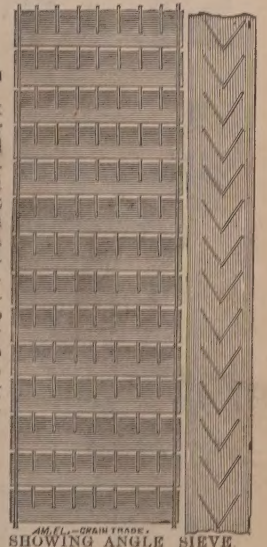


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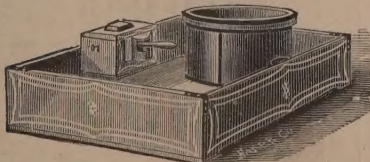
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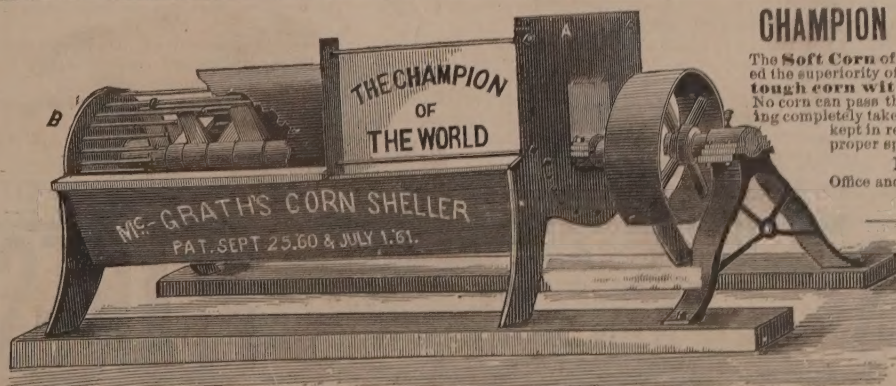
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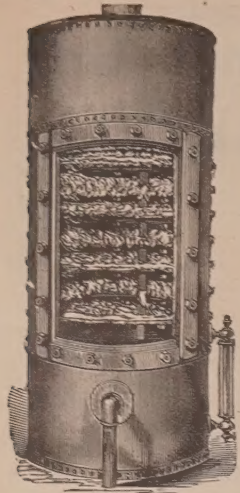
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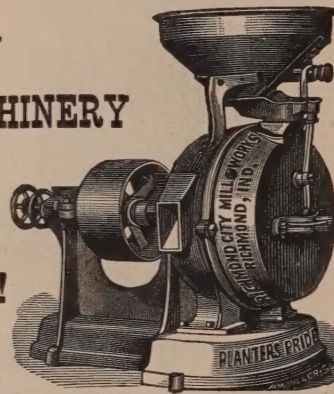
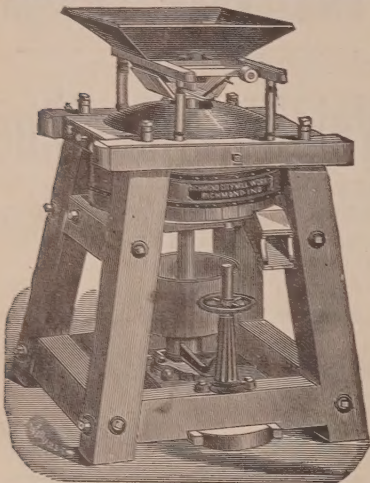
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THE BEST MADE!

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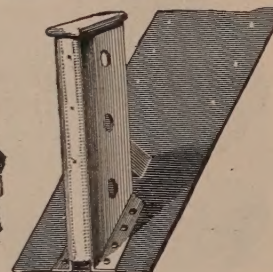
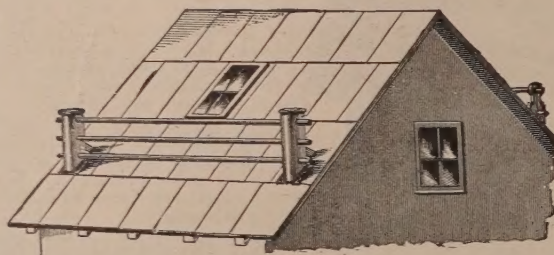
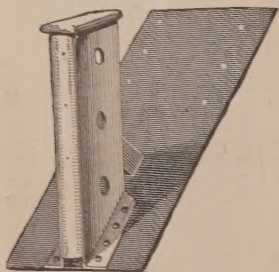
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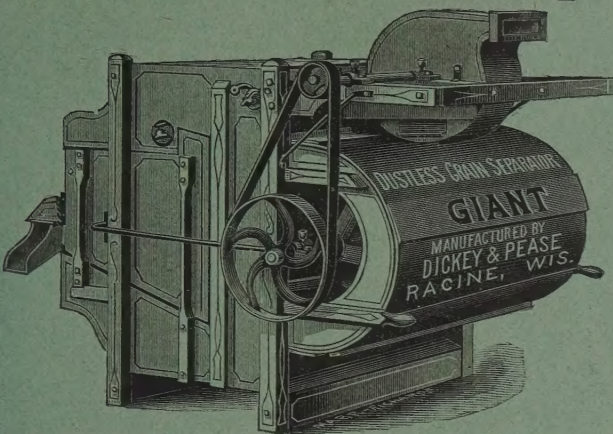
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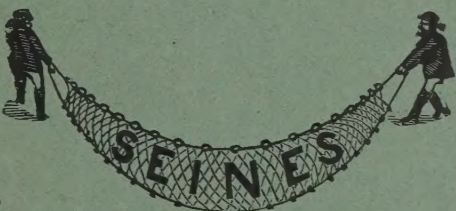
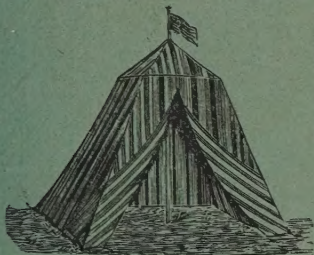
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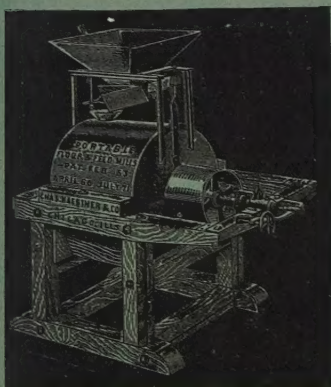
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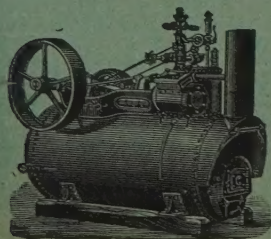
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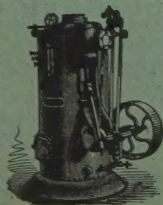


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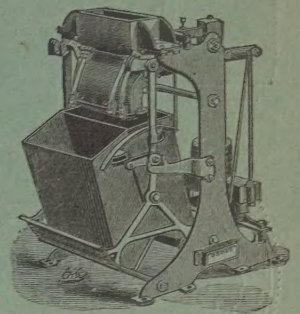
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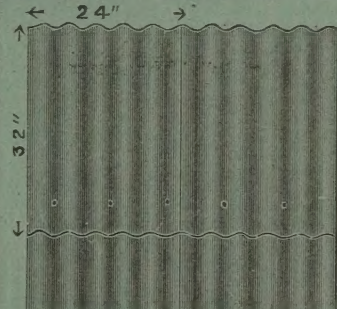
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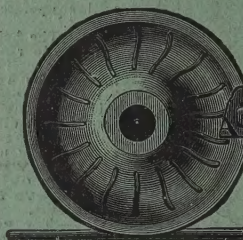
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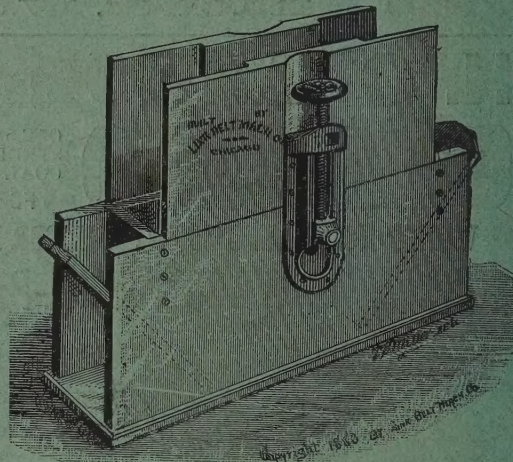
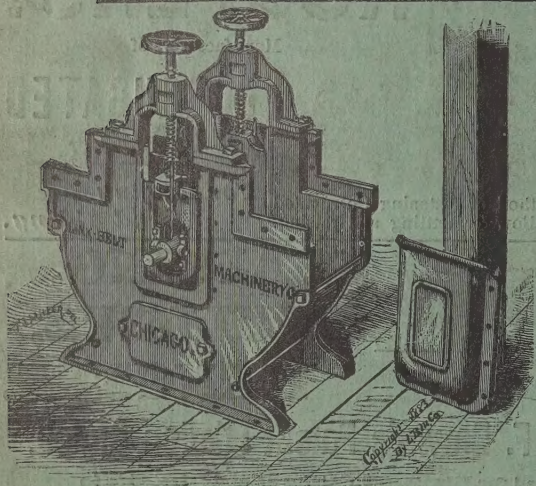
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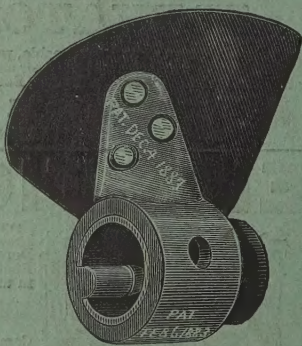
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